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CISTINE

GENERAL ORDER OF CISTINE

BOOK-ROSE

THE

COLOURED FIGURES & DESCRIPTIONS

OF

THE CISTINE ORDER OF CISTINE

THE CISTINE ORDER OF CISTINE

THE

COLOURED FIGURES & DESCRIPTIONS

OF

THE

COLOURED FIGURES & DESCRIPTIONS

ROBERT SWIFT, ESQ.

THE CISTINE ORDER OF CISTINE

LONDON

THE CISTINE ORDER OF CISTINE

THE CISTINE ORDER OF CISTINE

CISTINEÆ.

THE
NATURAL ORDER OF CISTUS,
OR
ROCK-ROSE;

ILLUSTRATED BY
COLOURED FIGURES & DESCRIPTIONS
OF ALL THE
DISTINCT SPECIES, AND THE MOST PROMINENT VARIETIES, THAT
COULD BE AT PRESENT PROCURED
IN THE
GARDENS OF GREAT BRITAIN;
WITH THE BEST DIRECTIONS
FOR THEIR
CULTIVATION AND PROPAGATION.

BY
ROBERT SWEET, F.L.S.

AUTHOR OF HORTUS SUBURBANUS LONDINENSIS; HORTUS BRITANNICUS;
BOTANICAL CULTIVATOR; THE BRITISH FLOWER GARDEN;
GERANIACEÆ; FLORA AUSTRALASICA; THE FLORIST'S GUIDE; THE
BRITISH WARBLERS, &c.

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ADVERTISEMENT.

THE present Volume contains all the figures of the different species, and the most prominent varieties, that the Author has at present been able to procure : he has, therefore, brought the work to a conclusion ; which he believes will be more agreeable to the greater part of his Subscribers, than to keep it open for a length of time, to admit others occasionally, as they may be newly introduced to the gardens, or as the old species might be sometimes found in obscure collections, where they are little expected to be.

A great many interesting species that were plentiful in the nursery collections some years back, are not now to be met with, many of them being sufficiently hardy to endure a favourable Winter without protection, but to be destroyed by a severe one, when the least covering would preserve them ; the correct names of them were also so little known, and one substituted for another so frequently, that caused less attention to be paid to them than they deserved, which we hope will not be the case in future, as a very little protection is sufficient for the whole of them, and nothing produces a more brilliant effect, than a collection of them planted in rock-work, or even grown in small pots, and placed together in a clump, where the different colours may all be intermixed, or kept separate, according to the taste or fancy of the possessor.

We are aware that there are still several species in the different collections, that we have not met with in flower; three or four species in Mr. Anderson's collection, at the Botanic Garden at Chelsea, some others in Mr. Barclay's collection, at Bury-Hill; those at the Chelsea Botanic Garden have not yet flowered, most probably owing to the cold wet Summer; several annual species that we have often raised from seeds several years back, we have not been able to procure since the commencement of the present publication.

We have also given a description of the Natural Order and of the published species that we have not been fortunate enough to meet with; this should be placed at the beginning of the work, to follow the list of books referred to, which must also follow the title-page.

To A. B. Lambert, Esq. we render our grateful acknowledgments for allowing us free access to his Library and Herbarium, which has been of great service to us in determining the plants of different authors, many of the original specimens from the authors themselves being now in Mr. Lambert's collection. To Mr. William Anderson, the worthy Curator of the Chelsea Botanic Garden, we have also to return our best thanks, for his kindness in allowing us to make drawings of several rare species, which we have not met with in any other collection; and also to the various Nurserymen, for their readiness in assisting us with specimens or plants for drawing and description, from their various establishments.

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In the Press, and soon will be Published, in One Volume,

THE SECOND EDITION OF

SWEET'S HORTUS BRITANNICUS; being a Catalogue of all the Plants cultivated in the Gardens of Great Britain, including all the published new introductions up to the present time; arranged according to their natural affinities, with the addition of the Linnean Classes and Orders, Systematic and English Names, where native, where introduced, colour of the flowers, accentuations, references to the books where described and also to figures, &c.; arranged according to the most modern improvements.

CISTINEÆ.

Calycis sepala 5 cum pedicello continua persistentia sæpiùs inæqualia, 2 exteriora ceteris sæpiùs minora interdùm evanida, 3 interiora per æstivationem contorta. *Petala* 5 hypogyna, caduca, æqualia, per æstivationem contorta, sed directione sepalis contraria. *Stamina* numero indefinita, sæpiùs numerosa, hypogyna, erecta. *Filamenta* libera. *Antheræ* ovatæ, biloculares, birimosæ, basi insertæ. *Ovarium* liberum. *Stylus* 1 filiformis. *Stigma* simplex. *Capsula* constans valvis 3-5, rariùs 10, nunc medio nervum longitudinalem placentarium gerentibus et tunc capsula 1-locularis, nunc nervo medio in septum plùs minùsve completum abeunte et tunc capsula completè aut incompletè multilocularis. *Semina* idèò semper verè parietalia, sed nunc placentæ parieti contiguæ nunc septi angulo interno adfixa plurima, parvula. *Albumen* farinosum. *Embryo* spiralis aut curvus intrà albumen. — *Suffrutices aut Herbæ*. *Folia simplicia, penninervia, integra aut subdentata, primordialia semper opposita, cetera sæpiùs opposita, interdùm alterna, basi nunc nuda, nunc stipulis binis foliaceis instructa*. Racemi sæpè floribus unilateralibus pedicellatis successivè evolutis et idèò ferè scorpioides. Flores rosacei, petalis fugacissimis, sæpiùs ephemeri, semper diurni, flavi albi aut purpurei, ungue sæpè discolore. Rami succo glutinoso sæpè obducti.—Ordo affinis hinc Violariis quibuscum olim confusus et à quibus differt præcipuè staminibus indefinitis, illinc Bixineis à quibus non differt nisi petalis semper præsentibus nec interdùm nullis, sepalorum æstivatione subdiversâ, albumine farinaceo, foliis nunquàm pellucidis, etc. *DC. prodr.* v. 1. p. 263.

CISTUS. *Supra folio* 1.

Sect. I. ERYTHROCISTUS. Sepala externa angustiora, sæpè minora, interna basi concava margine scariosa. Petala rosea, rubra aut purpurea. Capsula 5-loculares.

1. *C. complicatus* (Lam. dict. 2. p. 14.) Leaves petiolate, roundish ovate, bluntish, clothed with a white woolliness, crowded, underneath netted-veined: petioles dilated at the base, somewhat hollow and sheathing, the margins hairy: flower-stalks short, 1-flowered, in threes or fours, terminating the branches. *h.*—Native of the Levant, and the mountains of Valencia, in Spain. Flowers small, rose-coloured.

2. *C. sericeus* (Vahl symb. 1. p. 37.) Leaves ovate, woolly, three-nerved; lower ones on footstalks; upper ones sessile: flower-stalks hairy. *h.*—Native of Spain.—Flower-stalks clothed with long purplish hairs: petals and filaments purple.

3. *C. hybridus* (Vahl symb. 1. p. 37.) Leaves on footstalks, ovate, hoary: branches scaly: flower-stalks elongated, hairy. *h.*—Native of Spain: petals purple.

Sect. II. LEDONIA. Sepala 5, 2 externa majora valdè acuminata vel nulla; petala alba aut albida; stamina numerosa pistillo longiora; stigma subsessile magnum capitatum, capsulæ 5-10-loculares.—Frutices aut suffrutices, folia sæpè glutinosa.

4. *C. Lèdon* (Lam. dict. 2. p. 17.) Leaves connected at the base, oblongly lanceolate, nerved; upper side smooth and glossy; underneath clothed with silky wool: flowers in a corymbed cyme: flower-stalks and calyx clothed with silky wool. *h.*—Native of the South of France.—Flowers white. Duham. arb. 1. p. 168. t. 66.—This species was plentiful in collections some years back, but we know not where to find it at present.

5. *C. Sidéritis* (Spreng. syst. v. 4. pars. 2. p. 205.) Stem decumbent; leaves petiolate, obovate, somewhat rugged, underneath clothed with a white woolliness: flower-stalks solitary, elongated, 1 to 2-flowered, the upper part jointed, and with the calyx woolly, flowers nodding before flowering. *h.*—Native of Sicily.

6. *C. parvijolius*. Stem erect, very much branched: branches erect, rather crowded, densely woolly: leaves small, ovate, acute, rounded at the base, undulate, rugged, netted-veined, slightly crenulate at the margins, hairy on both sides, slightly hoary: flower-stalks axillary, 1 to 3-flowered, nodding before expansion: sepals taper-pointed, and clothed with bunches of hairs. *h.*—Native of the South of Europe.—Flowers white.

HELIANTHEMUM. *Supra fol. 2.*

Sect. I. HALIMIUM. *Supra fol. 4.*—* *Stylo brevi recto.*

1. *H. Libanôtis* (Willd. enum. 570.) Stem shrubby, smoothish, branching: leaves sessile, linear, the margins rolled back, upper side of a brownish green, underneath whitish: bractes oblongly linear, shorter than the 1-flowered flower-stalks: calyx of three smooth, glossy, ovate, taper-pointed sepals. *h.*—Native of Portugal, Italy, and Barbary. Barrel. ic. 294. Ledon VIII. Clus. hist. 1. p. 80. ic.—Petals straw-coloured; style about half the length of the stamens: stigma small.—This species was frequent in the collections a few years back, but we do not know that it is in any at present; it is nearest related to *H. umbellatum*.

** *Stylo subnullo, stigmaté magno.*

2. *H. alyssoides* (Vent. choix. t. 20.) Stem frutescent, very much branched, diffusely spreading; upper part of the branches clothed with white wool and hairs intermixed: leaves sessile, attenuated towards the base, oblongly ovate, bluntish, and clothed with short hairs; while young whitish turning green by age: flower-stalks terminal, solitary, or umbelled, 1-2-flowered, longer than the leaves: calyx of 3 sepals, taper-pointed, hairy. *h.*—Native of Spain, and the West of France.—Petals yellow, with a dark spot at the base: flower-bud dark purple towards the point.—The present plant was not unfrequent at the Nurseries some years ago, where it was considered a spreading variety of *H. algarvense*; and, from its habit, was not so much esteemed. We believe it has now quite disappeared from them; but is most probably still cultivated in some of the gardens in the neighbourhood of Paris. Ventenat's figure was from a plant cultivated in the garden of M. Cels.

3. *H. atriplicifolium* (W. enum. 569.) Stem shrubby, erect: branches covered with white patches, or spots: leaves on footstalks, broadly ovate, bluntish, undulate towards the base, covered on both sides with silvery spots: flower-stems racemose, hairy: calyx hairy, of 3 sepals, or rarely 5 sepals, the 2 outer ones very small. *h.*—Native of Spain. Barrel. ic. t. 292. Stem 4 to 6 feet high; upper leaves sessile: hairs long, hairy, brownish: petals large, yellow.—We saw numerous plants of this species

at the Nursery of Mr. Lee, at Hammersmith, several years ago; but we do not know any collection that possesses it at present.

4. *H. lasianthum* (Pers. syn. 2. p. 76.) Stem somewhat shrubby, very much branched: branches hoary, tinged with black, the upper part clothed with white wool, and spreading hairs intermixed; leaves nearly sessile, ovately oblong, more or less bluntish, keeled, obscurely ash-coloured, and clothed with short dense wool; flower-stalks 1-2-flowered, very short, hairy; calyx varying, with 3 to 5 sepals, very hairy. \bar{h} .—Native of Portugal.—Flower-stems, calyces, and young leaves, clothed with long white hairs; calyx sometimes with 5 sepals, the two outer ones very narrow, with a smooth point; petals yellow, sometimes with a dark spot near the base.

5. *H. involucratum* (Pers. syn. 2. p. 76.) Stem somewhat shrubby, erect, branching: branches clothed with short ash-coloured wool; lower leaves on footstalks, nearly ovate, small, clothed with short white tomentum: upper ones oblongly lanceolate, sessile, greenish, somewhat rough; flower-stems very short, surrounded by the leaves; calyx of 5 sepals: inner ones clothed with white tomentum: outer ones linear, smoothish, greener. \bar{h} .—Native of Spain, and Portugal.

Sect. II. LECHEOIDES. Supra folio 11.

6. *H. corymbosum*. Stem slightly frutescent, erect, branching: branches forked, somewhat pubescent, the upper part clothed with short ash-coloured wool; stem-leaves alternate, lanceolately oblong, bluntish, underneath clothed with grey tomentum: upper ones with revolute margins; corymbs of flowers closely crowded; calyx clothed with white wool, and hairs intermixed: outer sepals linear and obtuse: inner ones ovate, and acute, a little shorter than the capsule; style very short. \bar{h} .—Native of North America, from New Jersey to Georgia. Flowers pale yellow.

7. *H. rosmarinifolium* (Pursh fl. amer. 2. p. 364.) Stem erect, forked, branching: branches quite erect, pubescent; leaves oblongly linear, margins generally revolute, underneath clothed with white tomentum; small axillary branches very shortly pedunculate, 1-3-flowered, shorter than the leaves; inner sepals ovate, acute, three times smaller than the petals. γ .—Native of various parts of North America, Georgia, Canada, and round Boston, according to different authors.—Flowers small, crowded; capsule glossy, 3-sided, brown; petals pale yellow.

8. *H. ramuliflorum* (Mich. fl. amer. 1. p. 308.) Stems erect, hairy, powdered, upper part somewhat forked, branching: flowering branches slender; stem-leaves lanceolately elliptic, or oblong, acute, margin scarcely revolute, underneath clothed with a white tomentum; flowers pedunculate, solitary; inner sepals broadly ovate, taper-pointed; capsule globular, about the length of the calyx. γ .—Native of Carolina.—Flower-stalks and calyx hairy; style very short, erect; flowers yellow.

9? *H. obcordatum* (DC. prodr. 1. p. 284.) Stem erect, somewhat frutescent; leaves alternate, oblong, stipulate, somewhat crowded in bunches; sepals 3; petals 5, obcordate. \bar{h} .—Native of Mexico. Moc. et Sessé flor. mex. icon. ined.

10? *H. tripetalum* (DC. prodr. 1. p. 284.) Stems numerous, erect, slender; leaves alternate, linear, without stipules; sepals 5, the 2 outer ones small, linear; petals 3.—Native of Mexico.—Moc. et Sessé fl. mex. ic. ined.

11? *H. astylum* (DC. prodr. 1. p. 284.) Stems dwarf, spreading, subherbaceous; leaves somewhat alternate, stipulate, oval-oblong; sepals 5:

2 outer ones linear, very small; style none; stigma somewhat 3-lobed. 4.—Native of New Spain.—Moc. et Sessé fl. mex. ic. ined.

We have placed the last three species in this Section, chiefly, because all the American species we have yet seen, belong to it.

Sect. III. TUBERARIA. Supra folio 18.

12. *H. globulariæfolium* (Pers. syn. 2. p. 77.) Perennial; stems ascending, simple, upper part nearly naked; root-leaves with long footstalks, somewhat spatulate, obtuse; stem ones sessile, acute, the whole hairy; flower-stalks in a few-flowered cyme, bearing a bracte at the base; calyx smooth. 4.—Native of the North of Portugal.—Petals yellow, spotted at the base, or sometimes not spotted; stamens violaceous.

13. *H. bupleurifolium* (Dunal in DC. prodr. p. 270.) Stem herbaceous, erect, clothed at the base with a white pubescence: the upper part smooth, and somewhat glossy; leaves oblong, acute, smooth, tapering downwards into a long footstalk: stem ones opposite: the upper ones alternate, and bearing stipules; flower-stalks long, clothed with a hairy pubescence; pedicels and calyx clothed with long hairs. 4??—Native of Spain, and Portugal.—Pedicels without bractes; outer sepals ovate, obtuse, about half the length of the inner ones, which are acute; stipules long, somewhat linear.

14. *H. heterodoxum* (Dunal in DC. prodr. p. 270.) Stem erect, herbaceous, hairy: hairs long, white; leaves sessile, oblongly lanceolate, rough, woolly, nerves on the upper side hairy: lower ones opposite: upper ones alternate, bearing stipules; racemes secund, hairy, without bractes; flowers on short footstalks, near each other, somewhat imbricate; outer sepals largest, closing in the inner ones, similar to the bractes! ☉?—Native of Africa, near Vaile; also, in Spain.—Outer sepals hairy on both sides: inner ones smooth inside, glossy, with a membranaceous margin; capsule somewhat pointed; seeds numerous, nearly globular, pale yellow, glaucous, roughish; flowers yellow.

15. *H. plantagineum* (Pers. syn. 2. p. 77.) Stem herbaceous, erect, hairy; leaves elliptically lanceolate, opposite, sessile, 3-nerved: underneath clothed with shaggy wool, hairy on the nerves: upper side hairy, the hairs simple, and closely pressed to the leaves: upper ones more or less alternate, oblongly linear, bearing stipules; racemes short, without bractes; outer sepals smoothish, narrowly linear, about equal with the inner ones, which are clothed with white shaggy wool; petals slightly toothed. ☉.—Native of Crete, Corsica, Spain, and the North of Africa.—Plant clothed with white hairs; petals yellow, and not spotted.

16. *H. guttatum* (Mill. dict. n. 18.) Stem herbaceous, annual, somewhat hairy; leaves opposite, sessile, oblongly linear, 3-nerved, clothed with shaggy hairs: the extreme upper ones alternate; racemes loose, without bractes; flower-stalks filiform, nearly naked; outer sepals about half the length of the inner ones. ☉.—Native of England? France, Italy, Spain, Portugal, and Turkey; but is not *H. eriocaulon* intended for some of the above habitats? Not having seen a wild specimen of the English plant, we are not certain to which of the two it belongs; the one generally cultivated in flower borders, is *H. eriocaulon*, which is readily known by its very hairy stem, and bracteate racemes; the stem of *H. guttatum* being nearly smooth, and the racemes without bractes.—Petals yellow, with a dark spot near the base.

17. *H. inconspicuum* (Pers. syn. 2. p. 77.) Stem slender, herbaceous, branching, 2-3-forked, thinly hairy; leaves opposite, narrow, oblongly

linear, hairy : upper ones stipulate : extreme upper ones alternate ; racemes long, very slender ; flower-stalks short, all leaning to one side ; flowers minute ; petals oblongly linear, smaller than the calyx, every other one with a hairy margin. ☉.—Native of Spain, and Corsica.—Petals yellow.

Sect. IV. MACULARIA. DC. prodr. 1. p. 271.

Calyx 5-sepalus, sepalis externis angustis, internis striatis. *Petala* lutea, basi maculata. *Stylus* rectus erectusque ovario duplò longior, staminibus subæqualis. *Stigma* parvum, subtrilobum. *Capsula* lævis.—Suffructices aut herbæ? *Folia* petiolata, penninervia, angusta, exstipulata. *Flores* terminales, solitarii seu racemosi ; racemis paucifloris : pedicelli secundi, basi bracteati ; bracteis subulatis parvulis. DC. prodr. 1. p. 271.

18. *H. lunulatum* (DC. fl. fr. 4. p. 816.) Stem suffrutescent, somewhat twisted, branching : branches very slender, pubescent ; leaves flat, oblong, tapering to the base, the margins more or less fringed ; flowers terminal, on short footstalks, solitary, or from 2 to 4 in a sort of racemed umbel. ♀.—Native of the Alps, at Piedmont. All. auct. p. 30. t. 2. f. 3.—Calyx when in flower reflexed ; petals yellow, nearly entire, or very slightly notched, marked with a saffron-coloured crescent-shaped spot a little above the unguis.

19. *H. petiolatum*. Stem herbaceous ? twisted at the base : branches slender, ascending, somewhat forked, clothed with patches of ash-coloured wool ; leaves oblongly linear, acute, tapering down into a long slender footstalk, clothed on both sides with leprous patches of wool ; the upper side of a bluish green, underneath hoary ; racemes small, few-flowered ; flower-stalks and calyx pubescent. ☉?—Native of Spain.

Sect. V. BRACHYPETALUM. *Supra folio* 41.

20. *H. villosum* (Pers. syn. 2. p. 78.) Stem woolly, with hairs intermixed, of a sort of ash-colour ; leaves stipulate, petiolate, oblongly lanceolate, slightly toothed, clothed on both sides, particularly underneath with long shaggy wool ; racemes long, the flowers all leaning to one side before flowering, revolute at the point, axillary, and terminal ; flower-stalks erect, clothed with ash-coloured shaggy hairs, nearly opposite the bractes ; calyx oblong, taper-pointed, clothed with shaggy hairs. ☉.—Native of Spain.—Bractes nearly sessile, ovately oblong, sometimes thinly toothed ; petals lanceolate, narrow, shorter than the sepals, generally toothed, yellow.

21. *H. niloticum* (Pers. syn. 2. p. 78.) Stem herbaceous : branches erect, or ascending, clothed with short wool, or ash-coloured shaggy hairs ; leaves on short footstalks, opposite, oblongly elliptic, clothed with shaggy wool : upper ones alternate, opposite to the flowers, all stipulate ; flower-stalks erect, clothed with woolly hairs, as is also the taper-pointed calyx. ☉.—Native of Egypt, Barbary, Spain, and the South of France.

β *procumbens*. Stems procumbent, ascending, clothed with woolly hairs, somewhat hoary, leaves woolly on both sides, particularly underneath. ☉.—Native of the South of France, and, probably, a distinct species?

22. *H. intermedium* (DC. prodr. 1. p. 272.) Stem branching, erect, or spreading and ascendant, clothed with ash-coloured shaggy hairs ; leaves stipulate, petiolate, obovately oblong, bluntish, slightly toothed, veined, thinly woolly ; stipules linearly oblong, the upper ones scarcely twice the length of the footstalks ; flower-stalks nearly opposite to the leaves, and, with the calyx, clothed with ash-coloured shaggy hairs ; calyx oblong. ☉.—Native of Spain.—*Cistus salicifolius*. Cavan. ic. n. 156. t. 144.—Plant a span

high, somewhat ash-coloured; floral leaves or bractes alternate, linearly oblong, often petiolate, 1-2-stipuled, sometimes solitary, entire, or jagged, oftentimes shorter than the flower-stalks.

23. *H. denticulatum* (Pers. syn. 2. p. 78.) Stem branching, upright, or spreading: branches erect, or ascending, clothed with minute woolly pubescence, the points ash-coloured; leaves on short footstalks obovately oblong, somewhat pointed, more or less toothed with short teeth, woolly, green on the upper side, underneath hoary; stipules linear, the upper ones about half the length of the leaves; flower-stalks and calyx opposite to the bractes; bractes alternate, more or less jagged. ☉.—Native of the South of France.—Bractes somewhat ovate, often jagged, sessile, without stipules; calyx before flowering hoary on the outside.

24. *H. sanguineum* (DC. prodr. p. 273.) Stem herbaceous, short, crimson, clothed with a viscid pubescence; leaves on footstalks, opposite, ovate, blunt, roughish; lower ones without stipules, and crimson underneath: upper ones stipulate; stipules oblong-linear, obtuse, petiolate, scarcely shorter than the leaves; flower-stalks clothed with viscid hairs, axillary, or opposite to a leaf, when in fruit, bent backwards. ☉.—Native of Spain.—Leaves all opposite; flower-stalks always axillary, and opposite to the leaves; sepals striated on the inner side.

25. *H. ægyptiacum* (Mill. dict. n. 23.) Stem herbaceous, pubescent, erect, or ascending; leaves on short footstalks, opposite, linearly oblong, narrow, bluntish, margins rolled back: underneath pale ash-colour: upper ones alternate, stipulate; stipules linearly subulate; flower-stalks very slender, pubescent, opposite to the upper leaves; calyx ovately oblong, inflated, including the petals. ☉.—Native of Egypt, Barbary, and Spain. *Cistus ægyptiacus*. Jacq. obs. 3. p. 17. t. 68.—Flower-stalks thickened upwards, sometimes opposite to the short linear bractes; outer sepals narrow, short: inner ones 4-nerved, the nerves fringed; petals lanceolate, very short.

We have frequently raised plants from seeds of the different annual species that compose the above Section, but have not met with any of them since we commenced the present work.

Sect. VI. ERIOCARPUM. Supra folio 108.

26. *H. Lippii* (Pers. syn. 2. p. 78.) Stem suffrutescent, erect, pubescent, whitish, somewhat bifid, or forked; leaves opposite and alternate, on short footstalks, elliptically lanceolate, or linearly oblong, blunt, roughish, glaucescent, underneath clothed with a white hoariness; stipules narrow, erect, length of the footstalk; racemes short; flowers sessile, crowded, bracteate at the base; bractes very minute. ♀.—Native of Egypt.—Sepals pubescent: inner ones 4-5-ribbed, obtuse; petals ovate, yellow, scarcely longer than the calyx; stamens about 10, shorter than the petals.

27. *H. sessiliflorum* (Pers. syn. 2. p. 78.) Stem suffrutescent, erect, very much branched: branches pubescent; leaves opposite and alternate, linear, the margins somewhat rolled back, clothed with a short ash-coloured tomentum; stipules small, linear; racemes short; flowers sessile; bractes minute. ♀.—Native of dry hills, in the North of Africa.—*Cistus sessiliflorus*. Desf. fl. atl. 1. p. 418. t. 107.—Sepals pubescent, inner ones obtuse; petals yellow, a little longer than the calyx.

28. *H. ruficolum* (Spreng. syst. 2. p. 589.) Stem suffrutescent, thickly clothed with canescent starry fascicles of hairs; leaves on short footstalks: lower ones elliptic, obtuse, flat: upper ones narrower, linear, or oblong, margins somewhat revolute, all clothed underneath with starry bunches of

hairs, stipulate; flowers approximate, racemose; calyx very bristly, brownish; petals yellow. \bar{h} .—Native of the North of Africa.—*Cistus ruficomus*. Viviani floræ libycæ, spec. p. 27. t. 14. f. 5.

29. *H. lanuginosum* (Spreng. syst. 2. p. 589.) Stem suffrutescent, branching; the whole plant clothed with soft canescent hairs; leaves opposite, on short footstalks, elliptic, densely woolly: floral ones sessile, lanceolate, alternate, stipulate; flowers in a racème, all facing to one side, somewhat reflexed before their expansion; three inner sepals ovately lanceolate, 3-nerved: the two outer ones linearly lanceolate, all about equal in length; petals yellow, about equal with the calyx; capsule triquetrous. \bar{h} .—Native of the North of Africa.—*Cistus lanuginosus*. Viv. fl. lib. sp. p. 28. t. 14. f. 3.

30. *H. micranthum* (Spreng. syst. 2. p. 588.) Stem suffrutescent, clothed with starry bunches of hairs; leaves linear, obtuse, clothed with bunches of starry hairs: lower ones on short footstalks, opposite, nearly all flat: upper ones alternate, with revolute margins: floral ones sessile, linear, acute: stipules linearly lanceolate, a little longer than the footstalks; flowers racemose, distant; sepals large, 3-5-nerved, ovate, acute, longer than the petals; petals elliptic, the length of the stamens. \bar{h} .—Native of the North of Africa.—*Cistus micranthus*. Viv. fl. lib. p. 28. t. 14. f. 4.—Petals similar to *H. surrejanum*, yellow.

31. *H. Kahiricum* (Delil. fl. æg. 93. t. 31. f. 2.) Stem very much branched, twisted at the base: branches ascending; lower leaves opposite, the others alternate, obovate, margins rolled back, hoary, underneath nerved, stipulate; racemes with the flowers facing to one side; flowers on short footstalks: the flower-stalks and calyx villosely hairy; sepals acute; capsules oblong, villosely hairy. \bar{h} .—Native of Egypt. Petals connected at the points.

32. *H. confertum* (Dunal in DC. prodr. 1. p. 274.) Stem suffrutescent, branching, naked at the base: branches clothed with short ash-coloured wool; leaves lanceolately elliptic, bluntish, clothed on both sides with short wool: the upper side greenish, underneath hoary; stipules linear, small; racemes small, the flowers facing to one side, terminal, or opposite to a leaf; flowers crowded, nearly sessile; calyx hairy, inner sepals acute. \bar{h} .—Native of the Island of Teneriffe.

33. *H. canariense* (Willd. enum. 571.) Stem suffrutescent, procumbent; branches somewhat woolly, of a whitish ash-colour; leaves on footstalks, opposite and alternate, somewhat ovately elliptic, blunt, clothed with short wool on both sides, glaucous, underneath of a white ash-colour; stipules awl-shaped, shorter than the footstalks; racemes terminal, erect; bractes minute; flowers on short stalks, that are clothed with hoary wool. \bar{h} .—Native of the Canary Islands.—*Cistus canariensis*. Jacq. ic. 1. t. 97.—Calyx glaucous: inner sepals ovate, bluntish.

34. *H. mucronatum* (Dunal in DC. prodr. 1. p. 274.) Stem somewhat erect, spreading; branches woolly, intermixed with hairs, hoary; leaves on footstalks, ovate-elliptic, bellied, mucronate: the upper side green, roughish, clothed with bunches of starry hairs: underneath clothed with hoary wool; stipules awl-shaped, hairy, shorter than the footstalks; racemes mostly terminal; flowers on short footstalks, clothed with wool and hairs intermixed. \bar{h} .—Native of Teneriffe.—Calyx clothed with silky hairs; sepals broadly ovate, bluntish.

35. *H. distachium* (DC. prodr. 1. p. 284.) Stem suffrutescent, stipu-

late, erect; leaves opposite, oval-oblong, hoary; racemes terminal, leafy 2-parted; flowers opposite to the leaves. \bar{h} .—Native of Portugal.

Sect. VII. FUMANA. *Supra fol.* 16.

36. *H. ericoides* (Dunal in DC. prodr. 1. p. 274.) Stem frutescent erect; leaves alternate, imbricate, semi-cylindrical, short, smoothish, without stipules; flower-stalks solitary, 1-flowered, opposite to a leaf, or terminal, longer than the leaves; capsules, when open, naked. \bar{h} .—*Cistus ericoides*. Cavan. ic. 2. p. 56. t. 172.—Leaves somewhat revolute at the margin.

α *glabrum*. Branches and flower-stalks smooth. \bar{h} .—Native of Spain.

β *pubescens*. Upper part of the branches and flower-stalks pubescent. \bar{h} .—Native of Naples.

37. *H. læve* (Pers. syn. 2. p. 78.) Stem suffrutescent, nearly upright, smooth, branching; branches upright; leaves opposite, sessile, linear, smooth, revolute at the margin, keeled: upper ones alternate, stipulate; stipules long, subulate; flower-stalks solitary, 1-flowered, nearly terminal; calyx smooth. \bar{h} .—Native of hills, in Spain.—*Cistus lævis*. Cavan. ic. 2. p. 35. t. 145. f. 1.

38. *H. viride* (Tenor. prodr. fl. neap. p. 31.) Stem suffrutescent, ascending, smooth; leaves opposite, linear, revolute at the margins, green, smooth, somewhat mucronate, stipulate; stipules subulate, much smaller than the leaves; flowers in racemes: the flower-stalks and calyx villous and clammy. \bar{h} .—Native of Sicily.—Tenore fl. neap. v. 1. t. 47.

39. *H. juniperinum* (DC. prodr. 1. p. 275.) Stem suffrutescent, ascending, branched; leaves opposite, linearly awl-shaped, fringed, mucronate, flat, or the margin somewhat revolute: upper ones alternate; stipules subulate, the upper ones longest; flowers in a raceme: the flower-stalks and calyx villous and clammy. \bar{h} .—Native of the South of France, Italy, and Barbary.—Barrel. ic. t. 443.—Bractes solitary and linear.

40. *H. Barrelieri* (Tenor. prodr. fl. neap. p. 31.) Stem suffrutescent, erect: branches clothed with shaggy down; leaves opposite, linearly oblong, attenuated to the base, narrow, pubescent, revolute at the margin and fringed: upper ones alternate; stipules linearly subulate, erect, mucronate; racemes few-flowered; flower-stalks and calyx villous and clammy. \bar{h} .—Native of Italy, and Spain.—Barrel. ic. rar. t. 416.—Flowers yellow.

41. *H. syrticum* (Spreng. syst. 2. p. 593.) Suffrutescent, hairy branches spreading, clothed with close-pressed white hairs; leaves nearly sessile, opposite, flattish, the margins revolute, linearly elliptical, clothed with scattered hairs, underneath hoary: upper ones linear and more acute than the leaves; flowers in a short raceme, all facing to one side; sepals 5, very bristly; inner ones roundly ovate, 5-nerved: outer ones round, very short. \bar{h} .—Native of the North of Africa.—*Cistus syrticus*. Vivian. fl. lib. p. 27. t. 14. f. 2.—Flowers violet?

Sect. VIII. PSEUDOCISTUS. *Supra fol.* 2.

42. *H. piloselloides* (DC. prodr. 1. p. 284.) Suffrutescent; stipules none; leaves elongately elliptic, blunt, on long footstalks, the upper side green, underneath clothed with short hoary wool: both sides covered with long villous hairs, which are longest on the under side; flowers in panicles. \bar{h} .

—Native of the Pyrenees, on sunny rocks : flowers yellow.—*Cistus piloselloides*. Lapeyrouse.

43. *H. mólle* (Pers. syn. 2. p. 76.) Stem suffrutescent : branches generally simple, clothed with long hairs ; leaves roundish, ovate, blunt, petiolate, clothed on both sides with soft woolly hair ; racemes simple, and, with the calyx, clothed with ash-coloured woolly hairs. \bar{h} .—Native of Spain.—*Cistus mollis*. Cavan. ic. 3. p. 32. t. 262. f. 2.—Bractes subulate, minute, clothed with woolly hairs, ash-coloured ; flowers yellow.

44. *H. origanifólium* (Pers. syn. 2. p. 76.) Stem suffruticose, 2-3-forked ; leaves on foot-stalks, ovate, hairy on both sides ; racemes short, terminal ; petals scarcely longer than the calyx. \bar{h} .—Native of Spain.—*Cistus origanifolius*. Cavan. ic. 3. p. 31. t. 262. f. 1.—Calyx oblong ; petals yellow, not above half the size of *H. molli*.

45. *H. díchotómum* (Dunal in DC. prodr. 1. p. 276.) Stem suffrutescent : branches forked, smoothish ; leaves minute, ovate, acute, smooth, on short footstalks, the margin revolute ; racemes slender, few-flowered. \bar{h} . Native of Spain.—*Cistus dichotomus*. Cavan. ic. 3. p. 32. t. 263. f. 1.—Flowers small, deep yellow, scarcely so large as the flowers of *Spergula nodosa* ; leaves small, resembling *Thymus piperella*.

46. *H. penicillátum* (DC. prodr. 1. p. 277.) Stem suffrutescent : branches procumbent, clothed with long bristly hairs ; leaves green, clothed with bristly hairs on the nerves and margins on both sides : lower ones on footstalks, ovate, smallest : upper ones linearly oblong, nearly sessile ; racemes simple, and with the calyx bristly ; flowers minute. \bar{h} .—Native of Spain, and the South of France.

47. *H. obovátum* (Dunal in DC. prodr. 1. p. 277.) Stem suffrutescent : branches spreading, somewhat forked, the points covered with short ash-coloured wool ; leaves obovate, or oblong, blunt, green on both sides, fringed, and clothed with short hairs : lower ones minute ; racemes simple, few-flowered : calyx ash-coloured, hairy. \bar{h} .—Native of Spain, near Aranjuez.—Leaves on short footstalks.

48. *H. italicum* (Pers. syn. 2. p. 76.) Stem suffrutescent : branches simple, erect, long, and slender, clothed with woolly hairs ; leaves clothed with bristly hairs, the hairs strigose, and pressed flat to the leaf : lower ones ovate and smallest : upper ones lanceolate, oblong, or oblongly linear ; racemes simple, and, with the calyx, clothed with bristly hairs, hoary. \bar{h} .—Native of dry places near the Mediterranean.—*Cistus italicus*. Linn. spec. 740. Barr. rar. ic. 10. 510. t. 366.

49. *H. Séræ* (Cambessedes mem. mus. v. 14. p. 216. pl. 2.) Stem short, erect, suffrutescent, branching ; leaves opposite, without stipules, on short footstalks, somewhat cordately ovate, succulent, smooth, glaucous ; racemes short, somewhat corymbose ; germen 3-celled ; style crooked at the base ; stigma thickened. \bar{h} .—Native of the Balearic Islands, in sands, by the sea side, in the large Island between Palmam and Prat.—Nearly related to *H. marifolium*.

50. *H. marifólium* (DC. fl. fr. 4. p. 817.) Stem suffrutescent, procumbent ; leaves without stipules, petiolate, ovately cordate, or ovate, somewhat acute, upper side green and hairy, underneath hoary ; racemes terminal, solitary, simple, few-flowered. \bar{h} .—Native of Italy, Spain, and the South of France.—*Cistus marifolius*. Linn. spec. 741. not of English Botany.—Barrel. rar. ic. 521. t. 441.—Calyx ovately oblong.—We only know this plant, by Barrelier's figure, and a specimen of it in Mr. Lambert's herbarium ; it is not the least like the British plant, figured by this

name in English Botany, and considered as such in the gardens; we do not believe the present species is in any collection in this country, at present.

51. *H. rotundifolium* (Dunal in DC. prodr. 1. p. 277.) Stem suffrutescent; branching from the base: branches simple, generally decumbent at the base, clothed with a hoary tomentum; leaves on short footstalks: the upper side of a glaucescent green, underneath clothed with white wool: lower ones nearly orbicular, others ovate: the upper ones stipulate; stipules small, oblong, deciduous; racemes solitary, or 2 or 3 in a sort of crowded panicle, terminating the branches; calyx hairy. \bar{h} .—Native of Spain, and Barbary.—*Cistus nummularius*. Cavan. ic. 2. p. 34. t. 142.—Flowers yellow.

52. *H. rubellum* (Presl. Spreng. syst. 2. p. 591.) Leaves ovate, roundish, or oblong, acute: upper side dark red, and smooth: underneath clothed with short white wool; flowers racemed, pendulous; calyx hairy. \bar{h} .—Native of Sicily.

53. *H. crassifolium* (Pers. syn. 2. p. 77.) Stem suffrutescent, erect, smoothish; leaves somewhat succulent, on short footstalks: lower ones ovate, acute, without stipules: upper ones oblongly linear, stipulate; racemes short, in a sort of umbel; calyx hairy at the base. \bar{h} .—Native of Barbary, and near Valencia, in Spain.—*Cistus glaucus*. Desf. fl. atl. 1. p. 418. but not of Cavanilles.—Leaves on the upper side and at the margins, and the middle nerve underneath hairy; footstalks hairy: hairs thinly scattered, long, white.

54. *H. paniculatum* (Dunal in DC. prodr. 1. p. 278.) Stems suffrutescent, procumbent: branches ascending, or erect, flowering ones long, bearing stipules on the upper part; leaves on footstalks, ovate, bluntish, or rarely roundish: upper side green, underneath hoary; racemes opposite, or in threes, panicle. \bar{h} .—Native of mountains in Spain and Sicily.—Stipules minute, linear, acute; flowers small, yellow.

55. *H. polyanthon* (Pers. syn. 2. p. 78.) Stem suffrutescent, erect, hairy; leaves on footstalks: lower ones smallest, ovate, obtuse, underneath clothed with a short white tomentum: the upper ones stipulate, ovately oblong, or lanceolate, green on both sides, the margins fringed; stipules longer than the footstalks; racemes hairy, panicle; flower-stalks filiform, and with the calyx, hairy. \bar{h} .—Native of the North of Africa.—*Cistus polyanthus*. Desf. fl. atl. 1. p. 420. t. 108.

56. *H. cinereum* (Pers. syn. 2. p. 76.) Stem suffrutescent, erect, branching: branches opposite, hoary; lower leaves without stipules, ovate, acute, attenuated into a sort of footstalk at the base, densely clothed with a short tomentum, of a hoary ash-colour: upper ones stipulate; racemes panicle, axillary, opposite, terminating the branches in threes; calyx bristly. \bar{h} .—Native of Spain.—*Cistus cinereus*. Cavan. ic. 2. p. 33. t. 141.—Flowers small; petals entire.

57. *Lagascanium*. DC. Stems slenderer; calyx less bristly.

57. *H. squammatum* (Pers. syn. 2. p. 78.) Stem suffrutescent; branches long, erect; somewhat ligneous, leprously silvery; leaves on footstalks, oblong, blunt, leprously silvery, bearing stipules; stipules small, sessile, acute, soon turning brown; racemes axillary, solitary, or terminating the branches in threes; flowers leaning to one side; flower-stalks near each other, bracteate at the base; bractes soon turning brown; calyx leprous. \bar{h} .—Native of Spain, and Barbary.—*Cistus squammatus*. Cavan. ic. 139. Barr. rar. ic. t. 328.—Plant leprous: branches 4-sided at the base: scales orbicular, depressed in the centre; style longer than the stamens, twisted at the base.

Sect. IX. EUHELANTHEMUM. Supra fol. 7.

58. *H. lavandulæfolium* (DC. fl. fr. 4. p. 820.) Stem suffrutescent, erect, branching: branches long, round, hoary; leaves oblong-linear, revolute at the margin, underneath clothed with a hoary tomentum: young ones hoary on both sides; stipules and bractes linear, acute, fringed; racemes 1 to 3, terminal; flowers close together; calyx glaucous, sepals fringed: outer ones minute, after flowering reflexed: inner ones 2-nerved, oblique, acute. \bar{h} .—Native of the South of France, Spain, and Barbary.—Barrel. ic. t. 288.

β *syriacum*. Leaves somewhat flatter, of a greyish green on the upper side. \bar{h} .—Native of Syria.—*Cistus syriacus*. Jacq. ic. rar. t. 96.

γ *Thibaudi* (Pers. syn. 8. p. 79.) Stem suffrutescent, stipulate, woolly; leaves linear, their margins revolute; flowers racemose, ciliated with glandular hairs; sepals oblique, somewhat 3-sided; outer ones lanceolate, reflexed. \bar{h} .—Native of Corsica.—*Cistus racemosus*. Cavan. ic. 2. p. 33. t. 140. is the same plant after flowering. DC.

59. *H. Broussonetii* (Dunal in DC. prodr. 1. p. 279.) Stem shrubby, branching: branches opposite; leaves on short footstalks, flat, oblong-lanceolate, blunt, woolly on both sides, underneath hoary, upper side of a greyish green; stipules and bractes deciduous, linear, somewhat woolly; racemes short, branching; flowers facing to one side; calyx oblong, acute; inner sepals 4-nerved, somewhat woolly, yellowish. \bar{h} .—Native of Teneriffe.—Style double the length of the stamens, nearly erect; stipules somewhat falcate; flowers yellow.

60. *H. stæchadifolium* (Pers. syn. 2. p. 79.) Stem erect: branches clothed with hoary tomentum; leaves oblong-linear, bluntish, both sides somewhat woolly: the upper side of a greenish ash-colour: underneath hoary, with the margins revolute; stipules somewhat villous, linearly lanceolate; racemes before flowering revolute; flowers close together; calyx villous, outer sepals green and fringed, inner ones taper-pointed, hoary. \bar{h} .—Native of Portugal and Corsica.—*Cistus stæchadifolius*. Brot. fl. lusit. 2. p. 270.—This species is in the collection at the Chelsea Botanic Garden, but has not yet flowered.

61. *H. nudicaule* (Dunal in DC. prodr. 1. p. 279.) Stem shrubby, branching: branches smooth below: above clothed with hoary villous wool; leaves oblong-lanceolate, margins revolute, both sides tomentose: underneath hoary: above greenish yellow; stipules linear, longer than the footstalks; calyx deeply furrowed, scarcely pubescent, the nerves elevated and hairy. \bar{h} .—Native of the mountains of Valentia, in Spain.—Petals yellow.

62. *H. acuminatum* (Pers. syn. 2. p. 79.) branches erect, base and point hairy, naked between; leaves on long footstalks, oblong, the margins revolute, green on both sides, hairy: underneath somewhat woolly; stipules smoothish, linear, longer than the footstalks; racemes few flowered, loose, somewhat hairy; calyx smooth and glossy, transparent. \bar{h} .—Native of fields in Nice.—Petals yellow.

63. *H. ovatum* (Dunal in DC. prodr. 1. p. 280.) Stem suffrutescent, procumbent, very much branched: branches villous; leaves elliptically lanceolate, tapering into a footstalk at the base, bluntish, on both sides villously silky, fringed; stipules a little longer than the footstalks, villously fringed; flower-stalks 1 to 3-flowered, terminal, calyx somewhat villous. \bar{h} .—Native of the mountains of Geneva.—*Cistus ovatus*. Viv. fragm. 1. p. 63. t. 8. f. 2. Hairs white, silky; flowers yellow.

64. *H. lucidum* (Horn. cat. h. hafn. 498.) Suffrutescent, procumbent,

stipulate; leaves oval, green, glossy, revolute at the margins. \bar{h} .—Flowers yellow.—This plant is also in the Botanic Garden at Chelsea, but it has not yet flowered.

65. *H. angustifolium* (Pers. syn. 2. p. 79.) Stem suffrutescent, diffusely spreading: branches somewhat woolly, ash-coloured; leaves on short footstalks: upper ones linearly oblong, somewhat acute, margins revolute, underneath clothed with a hairy tomentum; upper side somewhat bristly; stipules hairy, longer than the footstalks; racemes loose; calyx pubescent and more or less hairy, the hairs deciduous. \bar{h} .—Native not known.—*Cistus angustifolius*. Jacq. vind. 3. p. 53.—Petals narrow at the base, not imbricate at the margins, yellow.

66. *H. obtusifolium* (Dunal in DC. prodr. 1. p. 281.) Stems suffrutescent: branches tomentosely hoary; leaves small, petiolate, linearly oblong, obtuse, margins revolute: underneath clothed with a hoary tomentum: upper side green, covered with white scattered hairs; stipules green oblongly linear, flat, blunt, scarcely fringed, the length of the footstalks; calyx bristly. \bar{h} .—Native of the Island of Cyprus.

67. *H. Lagáscae* (Dunal in DC. prodr. v. 1. p. 281.) Branches ascending, tomentosely hairy, hoary; leaves linear, blunt, very much revolute at the margins, nearly round, somewhat hairy, green; stipules flat, scarcely hairy, double the length of the footstalks; footstalks bristly, white; calyx glossy, nerved and furrowed; nerves fringed with white hairs. \bar{h} .—Native of Spain.—Leaves short; calyx small; petals yellow.

68. *H. violaceum* (Pers. syn. 2. p. 78.) Stem erect or ascending, very much branched, the branches opposite: small branches slender, clothed with white wool, and hairs intermixed; leaves small, linear, or spatulate, linear, obtuse, margins revolute, more or less woolly on both sides, underneath hoary; stipules minute, hairy; racemes loose, few-flowered; calyx smooth, violaceous, nervosely-furrowed. \bar{h} .—Native of Spain.—*Cistus violaceus*. Cavan. ic. 2. p. 38. t. 147.—Petals white.

69. *H. farinòsum*. Stem suffruticose, erect, branching: branches tomentosely hoary; leaves on short footstalks, linear or lanceolately linear, margins revolute, hoary on both sides, powdered; stipules subulate, longer than the footstalks; calyx powdered and clothed with very short hairs. \bar{h} .—Native of Spain.—*H. racemòsum* β . *farinòsum*. DC. prodr. 1. p. 281.—Flowers white.

70. *H. strictum* (Pers. syn. 2. p. 79.) Stem suffrutescent, erect, very much branched; branches straight, clothed with white tomentum; leaves nearly sessile, very narrow, linearly subulate, hoary, the margins revolute; stipules linear, setose; calyx nervosely striated, pale yellow, nearly smooth. \bar{h} .—Native of Spain.—*Cistus strictus*. Cavan. ic. 3. p. 32. t. 263. f. 2.—Petals white.

71. *H. hispidum* (Dunal in DC. prodr. 1. p. 282.) Stem suffrutescent, branching: branches ascending, tomentosely hoary; leaves on footstalks oblong, obtuse, slightly mucronate, margins revolute, underneath hoary, the upper side roughish, of a bluish green or glaucescent; calyx clothed with long spreading hairs. \bar{h} .—Native of the South of France.—*Cistus hispidus*. Lam. dict. 2. p. 26.—Petals white.

72. *H. fœtidum* (Pers. syn. 2. p. 79.) Stem suffrutescent, procumbent, clothed with long hairs; leaves oblong, green on both sides, roughish, hairy; stipules linear, hairy, longer than the footstalks; flower-stalks and calyx somewhat hairy. \bar{h} .—Native not known.—*Cistus fœtidus*. Jacq. ic. rar. 1. t. 98.—Bryony-scented; flowers white.

73. *H. ciliatum* (Pers. syn. 2. p. 79.) Stem suffrutescent, decumbent : branches clothed with a white tomentum ; leaves ovately lanceolate or lanceolately oblong, margins slightly revolute, underneath clothed with white tomentum, the upper side hairy ; stipules greenish, longer than the footstalks ; calyx membranaceous ; inner sepals nerved and furrowed ; nerves elevated, glandularly hairy. \bar{h} .—Native of Spain, Italy, and the North of Africa.—*Cistus ciliatus*. Desf. fl. atl. 1. p. 421. t. 109.—Petals rose-coloured.

74. *H. ásperum* (DC. prodr. 1. p. 283.) Stem suffrutescent, branching : branches long, ascending, or more or less erect, somewhat tomentose, roughish, ash-coloured ; leaves on footstalks, oblong, taper-pointed, margins revolute, underneath clothed with short white wool, the upper side green, somewhat woolly, roughish, setose at the point ; stipules awl-shaped, bristle-pointed ; angles of the calyx clothed with bristly hairs, the hairs long and numerous. \bar{h} .—Native of Spain.—Petals white.

β . *Roussæi* (DC. loc. cit.) Stem, leaves and calyx very hairy, hairs white. \bar{h} .—Native of the Levant. *Rousseau*.

75. *H. majoranæfolium* (DC. prodr. 1. p. 283.) Suffrutescent, erect, very much branched : branches hairy, and clothed with white wool ; leaves on footstalks, ovately oblong, somewhat pointed, margins revolute, underneath clothed with a white tomentum, the upper side of a bluish green, tomentosely hairy ; stipules subulate, bristle-pointed ; calyx very hairy, the hairs white. \bar{h} .—Native of the South of France.—Petals white.

76. *H. hirsutum* (DC. prodr. 1. p. 284.) Suffrutescent, stipulate, hairy ; leaves on footstalks, white underneath : lower ones rounded : upper ones lanceolate, acute ; flowers in a terminal raceme, generally facing all to one side. \bar{h} .—Native of rocky mountains on the Eastern Pyrenees.—*Cistus hirsutus*. Lapeyrouse abr. 303.—Flowers large, white.

* *Doubtful Species.*

77. *H. oligophyllum* (DC. prodr. 1. p. 284.) Frutescent, stipulate ; leaves on footstalks, ovately lanceolate, nerveless, entire at the margins, rough, the margins revolute ; flower-stems 1 flowered. \bar{h} .—Native near Jaffa ; petals yellow.

HUDSONIA. Suprà folio 36.

1. *H. Nuttallii*. Equally pubescent ; stem erect, much branched ; leaves about 2 lines long, filiform, somewhat imbricate, but distinct from the stem, flower-stalks lateral, crowded, when in fruit from 5 to 8 lines long ; calyx cylindrical, obtuse, and as well as the leaves clothed with an equal quantity of pubescence : segments oblique and convolute, the 2 smaller ones scarcely visible in the fruiting calyx, sufficiently distinct in the unexpanded flowers ; capsule cylindric-oblong, externally pubescent, always 1-seeded ; valves oblong, the central suture obsolete. \bar{h} .—Abundant over the barren sandy woods of New Jersey, Delaware, Maryland, Virginia, (Nuttall.) *H. ericoides*. Nuttall. gen. and spec. amer. 2. p. 4. scarcely of others ; his description at any rate does not agree with any that we have examined.

2. *H. montana* (Nutt. gen. amer. 2. p. 5.) Old plants partly smooth, tufted ; stems 3 to 5 inches long, decumbent ; leaves about a line longer than those of the preceding species, nearly smooth, filiform ; subulate, somewhat imbricate ; flower-stalks terminal, solitary, about an inch long when in fruit ; flowers more than twice the size of the preceding ; calyx bell-shaped, woolly : segments taper-pointed, smaller ones longer and subulate, con-

spicuously exerted and distinct; stamens 25 to 30; capsule villous, generally 3-seeded, 3 times the size of the other: valves ovate, partly septiferous; seeds granulate, somewhat angular. *h.*—Native of the summit of the highest mountains of North Carolina, abundant on the romantic summit of the Table-rock, a singularly elevated and isolated portion of the Catawba ridge. *Nuttall.*—Flowers as in all the species yellow.

3. *H. australis* (Spreng. syst. 2. p. 452.) Smoothish, erect; leaves linearly lanceolate, underneath clothed with scattered spreading hairs; flowers terminal, solitary, peduncled, calyx taper-pointed, somewhat hairy. *h.*—Native of Monte Video. *Sello.*

LECHEA. *Calyx* 3-sepalus bracteis sepalisve exter. duobus exterioribus stipatus. *Petala* 3, lanceolata. *Stamina* 3-12, sæpiùs numero ternaria. *Ovarium* 1 sub-trigonum. *Stigmata* 3, vix distincta. *Capsula* 3-valvis medio septi aut nerviferis; *semina* septo nervove adfixa paucissima sæpiùs 8; *albumen* carnosum. *Embryo* dorsalis rectiusculus, radicula inferâ: *cotyledonibus* ovato-oblongis.—*Herbæ* (Boreali-Americanæ) *incomptæ*; floribus *numerosis parvis*; ramis *infimis à floriferis sæpè diversis*. DC. prodr. 1. p. 285.

1. *L. villosa* (Elliott sketch. 184.) All over hairy; leaves oblongly lanceolate, mucronate; panicle pyramidal, leafy; branches flowering at the joints; flowers crowded in a sort of raceme, facing all to one side, on short flower-stalks. *4.*—Native of North America, from Canada to Florida. *L. major.* Pursh fl. amer. 1. p. 90. *non* Linn.—*L. minor.* Lin.—Lam. ill. t. 52. f. 2.

β? *mucronata* (Raf. prec. 37.) Hairy; stem erect, simple; raceme compound; flowers bracteolate. *4.*—Native of woods, in New Jersey.

2. *L. minor* (Pursh fl. amer. 1. p. 91.) Smoothish, leaves linearly lanceolate, acute; panicle leafy; branches elongated, all over covered with flowers; flowers on short flower-stalks; stem assurgent. *4.*—Native of hills from Canada to Pennsylvania.—Lam. ill. t. 52. f. 1.

3. *L. racemulosa* (Mich. fl. bor. am. 1. p. 77.) All over clothed with close-pressed pubescence; leaves linear, acute, fringed; panicle slender, very much branched, pyramidal; racemes naked; flowers small, alternate, pedicelled; stem erect. *4.*—Native of New Jersey to Carolina. Pursh fl. amer. 1. p. 91.—**GAURA** Lam. ill. t. 281. f. 3.

4. *L. thymifolia* (Mich. fl. bor. am. 1. p. 77.) All over clothed with close-pressed white woolly down; leaves linear, acute; panicle leafy, elongated; branches short; flowers in close clusters, lateral and terminal; flower-stalks very short; flowers small, clothed with white wool; stem upright. *4.*—Native of woods from Virginia to Carolina.—Lower branches creeping, similar to *Thymus Serpyllum*, from Pursh. fl. amer. sept. 1. p. 91.

5. *L. tenuifolia* (Mich. fl. bor. am. 1. p. 77.) Covered all over with scattered hairs; leaves very narrow; panicle spreading, somewhat naked; branches alternate; flower-stalks elongated, spreading; stem erect. *4.*—Native of dry gravelly hills from Virginia to Georgia. *Pursh.*—Leaves on the lower branches linear.

6? *L. verticillata* (Willd. spec. 1. p. 495.) Stem bristly; leaves oblongly ovate, serrulate; flowers whorled. *4.*—Native of the East Indies. Habit of *Spermacoce*.—Most probably not belonging to this genus, or natural order.

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obtusifolius	42
parviflorus	14
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TILLING, PRINTER, CHELSEA.





M. H. H. del. May 10 1825 W. H. W. sculp.

CISTUS vaginatus.

Oblong-leaved Rock-rose.

Sect. I. ERYTHROCISTUS. *Supra, fol 3.*

* Pedunculis unifloris, axillaribus vel terminalibus, solitariis, umbellatisve: stylo cylindrico sæpè staminibus longiore; stigmate capitato 5-sulcato. DC. prodr. 1. p. 264.

C. vaginatus, foliis oblongo-lanceolatis acutis trinerviis hirsutis subtus reticulatis petiolatis, petiolis basi dilatatis margine pilosis sulcatis vaginantibus, floribus paniculatis, pedunculis subtrifloris calycibusque hirsuto-villosis.

Cistus vaginatus. DC. prodr. 1. p. 265. Jacq. hort. schœnb. 3. p. 17. t. 282. Hort. Kew. 3. p. 304. ed. 2. v. 3. p. 304. Willden. sp. pl. 2. p. 1183. Pers. syn. 2. p. 75. Botan. Regist. 225. Spreng. syst. veg. 2. p. 585.

Shrubby, erect, branching, clothed with a brown deciduous bark: *branches* spreading, ascendant, cylindrical, thickly clothed with a dense white tomentum, and short viscous hairs intermixed. *Leaves* opposite, oblongly lanceolate, at first acute, but becoming blunter by age, covered on both sides with long white hairs, and some smaller ones intermixed; underneath 3-nerved, and reticulately veined, upper side of a whitish green, under side yellowish. *Petioles* short, channelled on the upper side, and rounded on the lower, with a furrow on each side, dilated and connected at the base, sheathing the stem, viscous, and clothed with unequal hairs. *Flowers* large, panicled, of a light rose colour. *Bractes* sessile, clasping the stem, lower ones leaf-like, oblongly lanceolate, acute, upper ones small, oblongly ovate. *Peduncles* generally 3-flowered, clothed with soft down, and longer spreading hairs. *Pedicels* cylindrical, a little nodding, slightly viscous. *Sepals* 5, papillose, hairy, the 2 outer ones scarcely one third as large as the inner ones, oblong-lanceolate, acute, points



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and margins a little reflexed: inner ones cordately ovate, concave, terminated by a long subulate point. *Petals* 5, imbricate, obcordate, crumpled, sides undulate and bent inwards, striate, rose-coloured, with a yellow spot at the base. *Stamens* from 130 to 140, rather more than half the length of the style: *filaments* slender, smooth, bright yellow: *pollen* orange-coloured. *Germen* 5-angled, the angles clothed with white silky hairs, and smooth between. *Style* nearly double the length of the stamens, smooth, flexuose. *Stigma* capitate, slightly 5-furrowed, papillose.

This fine species is a native of Teneriffe, and is therefore rather too tender to endure our severest winters in the open ground without protection; but it succeeds well if protected by a common frame or pit in severe frost; it will also thrive very well against a wall, so as to be covered with a mat in frosty weather, and a little dry litter placed about its roots; it is also a very proper plant for a Greenhouse or Conservatory, where its splendid flowers are seen to great advantage; it succeeds well in any light rich soil, or a mixture of light turfy loam, peat, and sand, will suit it very well; young cuttings strike root freely, taken off at a joint, and planted under hand-glasses in autumn; it also ripens plenty of seeds, by which it is readily increased.

Our drawing was taken from a plant, received from the Nursery of Messrs. Malcolm and Gray, at Kensington, last summer.



CISTUS candidissimus.

Canary Island Rock-Rose.

Sect. I. ERYTHROCISTUS. *Sepala* externa angustiora, sæpe minora, interna basi concava margine scariosa. *Petala* rosea, rubra aut purpurea. *Capsula* 5-loculares.

* *Pedunculis unifloris*, axillaribus aut terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmate capitato 5-sulcato. DC. prodr. 1. p. 264.

C. candidissimus, foliis ovato-ellipticis acutis dense tomentoso-incanis subtus reticulatis trinerviis breviter petiolatis; petiolis basi dilatatis margine pilosis vaginantibus, pedunculis terminalibus unifloris aut subcymosis, sepalis externis dimidio brevioribus.

Cistus candidissimus. *Dunal ex DC. prodr. 1. p. 264.*

Stem woody, erect, much branched: *branches* densely clothed with a soft white tomentum, and tufts of very short hairs intermixed. *Leaves* ovately elliptic, acute, clothed on both sides with a dense white tomentum, reticulately veined underneath; 3-nerved at the base, the margins slightly crenulate, and fringed with very short hairs. *Petioles* short, dilated and joined at the base, sheathing the stem, hairy. *Peduncles* terminal, often solitary and one-flowered, and shorter than the leaves, but sometimes subcymose and several-flowered, reaching beyond the leaves, densely tomentose with tufts of short hairs intermixed. *Bractes* 2, at the base of the peduncles, leaf-like, lanceolate, taper-pointed, longer than the peduncles. *Sepals* 5, tomentose, unequal, the 2 outer ones scarcely half the length of the others; inner ones ovate, concave, mucronate, with a scarioso membranaceous margin on the inside, the outer margin naked. *Petals* 5, of a pale rose colour, with yellow unguis, margins slightly crenulate, distinct or scarcely imbricate at the base, about

twice the length of the sepals. *Stamens* about 200 ; pollen orange coloured. *Germen* sericeous. *Style* smooth, flexuose, nearly double the length of the stamens. *Stigma* capitate, tuberculate.

This fine species is a native of the Canary Islands, and was introduced to this country about the year 1815, by the late Professor Christian Smith ; by him the seeds were given to Mr. William Anderson, Curator of the Apothecaries Company's Garden at Chelsea ; and from a strong young plant raised from a cutting, our drawing was taken last summer. In M. Decandolle's *Prodromus* it is described with solitary one-flowered peduncles ; this was the case with all the old stunted plants at Mr. Anderson's, but the young healthy plants all produced their flowers in a corymbus, as represented in our figure ; it is also probable that the plants on the rocky mountains of the Canaries are also stunted, and produce single flowered peduncles.

The present species is not sufficiently hardy to bear our winter in the open air, except it be well covered up with mats in severe weather, and dry litter laid about its roots, as recommended for the former species ; it is, however, a hardy greenhouse plant, and will succeed in a common frame, covered up with mats in severe weather, but openly exposed when the weather is fine and mild ; plants preserved in frames through the winter, and turned out in the borders of shrubberies in spring, will answer best. It succeeds well in a light sandy soil, or a mixture of sandy loam and peat suits it very well ; it may be propagated by cuttings planted under hand-glasses, or by seeds, which sometimes ripen.



CISTUS albidus.

*White-leaved Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra, fol. 3.*

* Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmatibus capitato 5-sulcato. DC. prodr. 1. p. 264.

C. albidus, foliis sessilibus oblongo-ellipticis incano-tomentosis subtrinerviis, floribus 3-8 terminalibus subumbellatis, sepalis externis majoribus, petalis valde imbricatis.

Cistus albidus. Linn. spec. 737. Willden. sp. pl. 2. p. 1186. Pers. syn. 2. p. 75. DC. prodr. 1. p. 264. Hort. Kew. ed. 2. v. 3. p. 306.

Cistus mas. I. Clus. hist. 1. p. 68. ic. Park. theatr. 658. f. 1.

Stem shrubby, erect, much branched, and thickly crowded with leaves, clothed with a brown scaly bark: *branches* opposite, erect, thickly clothed with dense wool. *Leaves* opposite, crossing each other, sessile, connate at the base and surrounding the stem, oblongly elliptic or lanceolate, scarcely acute, much undulate, 3-nerved at the base, reticulately veined, clothed on both sides with a dense white stellate pubescence. *Flowers* 3 to 8, terminating the branch in a sort of umbellate corymbus, of a bright lilac or pale rose colour. *Bractes* leaf-like, ovate, obtuse. *Pedicles* cylindrical, erect, stout, densely tomentose. *Calyx* of 5 acute sepals, the 2 outer ones largest, cordate, strongly 5-nerved, margins a little rolled back, densely clothed with a starry tomentum; inner ones narrower, taper-pointed, more inclining to membranaceous, also clothed with a stellate tomentum. *Petals* 5, broadly obovate, much imbricate, slightly crenulate, more or less crumpled, of a bright lilac or rose-coloured, with a yellow spot at the base. *Stamens* numerous, from 180 to 200, in a dense tuft; *filaments* slender, yellow; *anthers* 2-celled, opening at

the sides to discharge the pollen, which is orange coloured. *Germen* densely clothed with silky close-pressed white hairs. *Style* pubescent, thickening upwards, about the length of the stamens. *Stigma* capitate, slightly 5-lobed, pubescent.

The present plant is one of the most desirable of its tribe, being quite hardy, and will thrive in almost any soil or situation where it is not too moist; its flowers are large, and produced in abundance, and it attains to a height of 5 or 6 feet when grown in a sheltered situation; fine plants of it are growing in the Garden belonging to the Apothecaries' Company, by the side of the rock-work, and it is not an uncommon plant in other collections, but is often confused with other species, particularly with *C. incanus*, which is at present a much rarer plant, and which we have been on the look out for, for some time past, and have at last met with both of Decandolle's varieties at Mr. Lee's of Hammersmith; the narrow-leaved one figured by Clusius, is, we have little doubt, specifically different from the other. *C. incanus* of the Flora Græca is certainly different from both, and is probably *C. cymosus* of Decandolle, which is mentioned in his Prodomus as being cultivated in Cels's garden under the name of *C. incanus*.

Many cultivators are deceived by the name of the present species, thinking it cannot be *C. albidus* as its flowers are red, but expect that to be one of the white flowered species. It succeeds best in a light sandy soil, and young cuttings planted under hand-glasses in Autumn will soon strike root; it may also be raised from seeds, which sometimes ripen plentifully. Drawn at the Nursery of Mr. Colvill, last Summer.



CISTUS rotundifolius.

*Round-leaved Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra fol. 3.*

* *Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico, sæpè staminibus longiore; stigmatè capitato 5-sulcato.* DC. prodr. 1. p. 264.

C. rotundifolius, foliis rotundato-ovatis obtusis planis rugosis reticulato venosis utrinque fasciculato-pilosis, petiolis sulcatis subvaginantibus, pedunculis hirsutissimis subcymosis unifloris 1-3-nisve, sepalis cordatis acutis pilosis, petalis imbricatis.

C. villosus β. *virescens.* DC. prodr. 1. p. 264?

Cistus latifolius magno flore. *Barrel. ic.* 1315.

A pretty dwarf, very bushy, upright, evergreen shrub, scarcely exceeding a foot in height, but densely crowded with branches, clothed with rigid persistent hairs: *branches* upright, short, thickly clothed with fascicles of short rigid unequal hairs. *Leaves* opposite, often as broad as long, roundly ovate, very obtuse, flat, rugged, reticulately veined, of a darkish green, clothed with bunches of short hairs on both sides, rough at the margins: upper ones narrower, not so blunt, and more tapering to the base. *Petioles* winged on each side, sheathing the stem at the base, channelled on the upper side, densely clothed with short hairs. *Flowers* purple, in a terminal few-flowered cyme. *Bractes* leaf-like, linear, obtuse, sessile, one at the base of each peduncle. *Peduncles* 1 to 3-flowered, thickly clothed with fascicles of short rigid hairs. *Calyx* of 5 sepals, broadly cordate, acute, reticulately veined; the outer ones largest, densely clothed with shortish rigid hairs. *Petals* 5, much imbricate, broadly obovate, a little crumpled, purple, with a yellow spot at the base. *Stamens* numerous:

filaments unequal in length, slender, yellow : *pollen* orange-coloured. *Germen* silky. *Style* smooth, long, much curved. *Stigma* capitate, slightly 5-furrowed, granular. *Capsule* about the size of a small hazel-nut, five-celled, and many seeded.

Our drawing of this very handsome plant was made at the Nursery of Mr. Pamplin, at Lavender-hill, in the Wandsworth-road, the only collection in which we have observed it ; we think there can be no doubt but it is the same as the one figured in Barrelier's *Icones* above referred to, but it can scarcely be *C. sericeus* to which that figure has been generally added as a synonym ; it may also, probably, be Decandolle's variety β . of *C. villosus*, but we have no hesitation in giving it as a distinct species, as it is quite different in habit, as well as in the form of the leaves, and its very large capsule : it makes a snug dwarf bushy shrub, and flowers nearly all the Summer ; and appears to be quite hardy, having stood the two last Winters without protection, thriving well in the common soil of the Nursery. It is readily increased by cuttings, planted under hand-glasses, in Autumn, or by layers, and may also be raised from seeds.

A few days since, we received a fine flowering specimen of this plant, from Mr. J. Miller's Nursery at Bristol, so that it is also in that extensive collection.





CISTUS villosus.

*Villous Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra*, fol. 3.

* Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmate capitato 5-sulcato. DC. prodr. 1. p. 264.

C. villosus, foliis subrotundo-ovatis planis undulatisve rugosis tomentoso-hirtis petiolatis, petiolis basi dilatatis sulcatis subvaginantibus, pedunculis subcymosis unifloris 1-3-nisve, sepalis villosis, petalis patentissimis basi imbricatis.

Cistus villosus. DC. prodr. 1. p. 264. Lam. dict. 2. p. 12. Willden. sp. pl. 2. p. 1181. Pers. syn. 2. p. 74. Hort. Kew. ed. 2. v. 3. p. 303.

Cistus mas major, folio rotundiore. Du Hamel arb. 1. p. 167. t. 64.

Stem shrubby, much branched, clothed with a brown cracked scaly bark: *branches* opposite, spreading, erect or ascending, densely clothed with short canescent wool, and a few longer hairs intermixed. *Leaves* opposite, roundly ovate, bluntish, some flat, others undulate, reticulately veined, rugose, tomentosely hairy, of a grey or whitish appearance, thickly clothed on both sides with short stellate hairs, attenuated down the petiole. *Petioles* villosely hairy, channelled and dilated at the base, sheathing the stem. *Flowers* in a sort of cyme, rose-coloured, or purple, varying in colour on different plants. *Bractes* leaf-like, one at the base of each peduncle, sessile, lanceolate, taper-pointed. *Peduncles* 1 to 3-flowered, thickly clothed with spreading villous hairs. *Calyx* of 5 sepals, which are cordately ovate, taper-pointed, thickly clothed with long villous hairs: outer ones leaf-like, with the margins a little reflexed: inner ones membranaceous, concave. *Petals* 5, much spreading, imbricate at the base, obovate, or obcordate, much crumpled, somewhat crenulate, varying

from a light pink, or rose colour, to a dark purple, with a yellow spot at the base. *Stamens* numerous, from 150 to 200, overtopping the stigma: *filaments* slender, smooth, pale yellow: *anthers* 2-celled, attached to the filament by their back: *pollen* bright orange-colour. *Germen* thickly clothed with long closely-pressed silky hairs. *Style* smooth, slightly curved. *Stigma* capitate, slightly 5-furrowed, granular.

The present is one of the commonest species in all the Nurseries about London, where it is sold under several different names, and generally for *C. salvifolius*, which is a white flowered species, but resembles the present plant a little in habit: there is a good characteristic figure of the present plant in Duhamel's work above quoted, and we have seen fine specimens of it in Mr. Lambert's Herbarium, that were received from Crete under the name of *C. creticus*; but it is very different from *C. creticus* of Jacquin, and the Flora Græca, a plant that we have not yet met with in any collection; and which, if any of our Subscribers possess, we should feel much obliged for an opportunity of giving a figure of it: it probably still exists in the Botanic Garden at Oxford.

The present forms a snug compact bush, and continues to produce its flowers in succession for a length of time; the flowers vary in colour, from a pale lilac to a dark purple, and very much even on the same plant at different times. M. Decandolle's variety *virescens* we have not yet met with. If planted on rock-work, or in the open borders, it will require to be covered with a mat, or some other covering, in severe frosty weather, as it is a native of the South of Europe; but it will succeed very well through a mild Winter without the least protection: it thrives best in rather a dry situation, as too much moisture is apt to rot its roots; it also succeeds well in pots in a light sandy soil, when it can be preserved in frames in Winter. Cuttings of it strike root freely, if planted under hand-glasses in August or September; it may also be raised from seeds, which ripen plentifully.





CISTUS undulatus.

Wave-leaved Rock-Rose.

Sect. I. ERYTHROCISTUS. *Supra fol. 3.*

* *Pedunculis unifloris, axillaribus aut terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmatè capitato 5-sulcato.*

C. undulatus, foliis subseßilibus aut in petiolum brevem attenuatis margine undulatis rugosis scabris utrinque pilosis subcanescentibus; inferioribus elliptico-oblongis acutis basi attenuatis trinerviis: superioribus linearibus basi connatis, pedunculis solitariis 1-3-floris, sepalis longe acuminatis villosis, capsulâ rotundo-ovata adpresse sericeo-pilosa.

Cistus undulatus. *Dunal in DC. prodr. v. 1. p. 264. n. 8. Swt. hort. brit. edit. 2. p. 41. n. 8.*

Stem shrubby, much branched, forming a handsome close compact bush: *branches* thickly clothed with short woolly hairs, the younger ones with spreading villous ones. *Leaves* variable, sessile, or attenuated into a sort of short footstalk at the base, oblong or elliptically oblong, acute, the lower ones ovate and bluntish, more or less undulate at the margins, rough and rugged, three-nerved and attenuated at the base, reticulately veined, hairy on both sides and slightly canescent, the hairs short and in fascicles: *upper leaves* linear, spreading, the points generally reflexed, connected at the base. *Flowers* varying from light to bright purple, terminal, solitary or in threes, terminating the young branches, which sometimes give an appearance of being paniculate or cymose, the young branches being oftentimes crowded at the points of the main shoot. *Peduncles* short, densely clothed with tufts of hairs, which give them a woolly appearance. *Calyx* of 5 sepals, that are ovate, concave, villous at the base, and tapering to a long

slender point, strongly nerved with purple nerves : inner ones broadest and more concave, membranaceous at the edges. *Petals* 5, broadly obovate, imbricate, crumpled, slightly crenulate, of a reddish purple, pale yellow at the base. *Stamens* numerous : *filaments* bright yellow, smooth, unequal in length : *pollen* golden yellow. *Ger-men* roundish, densely clothed with close-pressed white hairs. *Style* smooth, slender at the base and thickening upwards, about the length of the stamens. *Stigma* 5-furrowed, capitate. *Capsule* roundly oval, densely clothed with close-pressed silky hairs.

We are now convinced that the present plant is *C. undulatus*, having received a plant of it from the Chevalier Soulange Bodin, under that name ; it also agrees very well with the description in Decandolle's *Prodromus* ; and is readily distinguished from *C. creticus*, with which we had confused it, by its long style, which in that species is very short, and quite hid by its large stigma.

Our drawing was made from a plant, at the Nursery of Mr. Lee, at Hammersmith ; we also received a plant of it from Mr. Miller, of the Bristol Nursery, which we planted in our garden in a northern aspect, with many other rather tender sorts ; they stood there the whole of last Winter without the least protection, and not one of them were hurt ; whereas several others that were planted in a southern aspect, were all killed, or so severely hurt, that they were not worth keeping.

The leaves of the present species are much more undulate in Autumn and Winter, than in the Summer when in bloom ; at that time they are very slightly undulate. It is a native of the Levant ; as numerous plants of it were raised at Messrs. Young's Nursery, at Epsom, from seeds received from thence ; it is most probably also a native of the South of Europe. Any light sandy soil will suit it very well ; and young cuttings, planted under hand-glasses, in August or September, will strike root readily.



CISTUS incanus.

Hoary Rock-Rose.

Sect. I. ERYTHROCISTUS. *Supra fol. 3.*

* Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmate capitato 5-sulcato. DC. prodr. 1. p. 264.

C. incanus, foliis ovato-spathulatis tomentoso-incanis rugosis basi attenuatis subtrinerviis sessilibus subconnatis; superioribus angustioribus, pedunculis subunifloris villosis, sepalis ovatis villosis, petalis imbricatis.

Cistus incanus: Linn. spec. 1. p. 737. Willden. spec. pl. 2. p. 1185. Pers. syn. 2. p. 75. DC. prodr. 1. p. 264. Spreng. syst. 2. p. 585. Hort. Kew. ed. 2. v. 3. p. 305. Curtis Botan. magaz. 43. Swt. hort. brit. p. 34. n. 7.

Stem shrubby, very much branched: *branches* short and crowded, thickly clothed with short grey down, and longer hairs intermixed. *Leaves* sessile, ovately spathulate, obtuse, attenuated towards the base, slightly 3-nerved, rugose, undulate, reticulately veined, clothed with a short dense white tomentum, which wears off by age, slightly connected at the base, and sheathing the stem a little: upper ones narrower and acute, more hairy. *Peduncles* short and stout, villosely tomentose, one-flowered, generally solitary, but sometimes in pairs. *Calyx* of 5 sepals, which are ovate and acute, thickly clothed with short villous down; two inner ones concave, with subulate points, membranaceous on one side. *Petals* 5, obovate, imbricate, undulate, and crumpled, of a light rosy lilac, with a faint yellow spot near the base. *Stamens* very numerous, surrounding the stigma: *filaments* long and slender, smooth, of a light yellow: *pollen* bright orange colour. *Germen* clothed with long villous down. *Style* about the length of the stamens, smooth, slender at the base. *Stigma* capitate, 5-furrowed, papillose.

Our drawing of this plant was taken at the Nursery of Mr. Lee, at Hammersmith, the only collection in which we have met with it; and we were at one time afraid that it had disappeared altogether from our collections, as when we have enquired for it, we have always been shown *C. albidus*, or *C. pallens*, the species that are generally sold for it at the Nurseries; we also possess a drawing of the plant that is figured by Clusius, which has been considered a narrow-leaved variety of the present; but on comparing the two plants when flowering together, in a living state, we find sufficient characters to distinguish them as distinct species, we have therefore named that *C. canescens*, which will be published in our next number. *C. incana*, of the Flora Græca, is certainly not our plant, but from the figure we believe it to be *C. cynosu* of Decandolle.

The present plant will endure our mildest Winters in the open air, but it will require covering in severe frosty weather; it is also best to preserve some plants of it in pots, that they may be protected in frames or in the Greenhouse in Winter; a light sandy soil suits it best, and young cuttings, planted under hand-glasses in August or September, will soon strike root, so that they are not planted too close together, or they will be very likely to damp.





CISTUS canescens.

Narrow-leaved hoary Rock-Rose.

Sect. I. ERYTHROCISTUS. *Supra fol. 3.*

* *Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico sæpè staminibus longiore; stigmatè capitato 5-sulcato.* DC. prodr. 1. p. 264.

C. canescens, foliis oblongo-linearibus obtusiusculis tomentoso-canescens, undulatis subtrinerviis sessilibus subconnatis, pedunculis terminalibus unifloris aut subcymosis, sepalis ovatis acutis nervosis stellato-pubescentibus, petalis obovatis distinctis.

Cistus canescens. Swt. hort. brit. p. 468. n. 29.

Cistus mas 2. Clus. hist. 1. p. 69. ic.

Cistus incanus β. foliis linearibus longis. DC. prodr. 1. p. 264.

Stem shrubby, much branched: *branches* spreading, densely clothed with fascicles of very short rigid hairs, which are stellately spreading; the leaves, peduncles, and calyx, are all densely covered with the same sort of hairs, which are so short and close to each other as to appear like soft down. *Leaves* sessile, clasping the stem and connected at the base, oblongly linear, bluntish, the upper ones more pointed, attenuated a little towards the base, but not near so much as in *C. incanus*, some a little undulate, others quite flat, of a white hoary colour, underneath more or less 3-nerved and reticulately veined, a little rugose: *upper leaves* broadest at the base, with acute points. *Flowers* terminal, in a sort of cyme on the strong shoots, on the weaker ones solitary. *Peduncles* cylindrical, with a leafy bracte at the base of each. *Calyx* of 5 sepals, which are ovate, acute, undulate, strongly nerved with 4 to 6 prominent nerves, inner ones rather smallest and convex, or concave inside, with needle-shape points. *Petals* 5, obovate, distinctly spreading, much crumpled, the margins

crenulate, of a darkish purple, tinged with blue, and a yellow spot at the base of each. *Stamens* numerous, about the length of the style; *filaments* smooth, yellow, unequal in length: *pollen* orange-coloured. *Germen* densely clothed with close-pressed white hairs. *Style* smooth, a little bent, very slender at the base, but thickening upwards. *Stigma* capitate, slightly 5-furrowed, fimbriate.

Our drawing of this rare and handsome plant was taken at the Nursery of Mr. Lee, at Hammersmith, last Summer. It has generally been considered as a variety of *C. incanus*, but we have no hesitation in giving it as a distinct species, easily distinguishable at first sight from all others, whether in flower or not; as it is a native of the South of Europe, it is rather more tender than some of the other species, and requires a little covering in severe frosty weather, either the covering of a mat, or to be protected by a frame, succeeding well in a light sandy soil. Young cuttings, planted under hand-glasses in August or September, will soon strike root, but they must not remain covered too long, or they will be liable to damp off.





CISTUS crispus.***Curled-leaved Rock-Rose.***

Sect. I. ERYTHROCISTUS. *Supra*, fol. 3.

* *Pedunculis unifloris, axillaribus vel terminalibus, solitariis umbellatisve; stylo cylindrico sæpe staminibus longiore; stigmate capitato 5-sulcato.* DC. prodr. 1. p. 264.

C. crispus, foliis sessilibus lineari-lanceolatis undulato-crispis trinerviis rugosis pubescentibus, floribus subsessilibus 3-4-nis umbellatis. DC. prodr. 1. p. 264.

Cistus crispus. Linn. spec. 1. p. 738. Willden. sp. pl. 2. p. 1188. Pers. syn. 2. p. 75. Cavan. ic. 2. p. 57. t. 174. Hort. Kew. ed. 2. v. 3. p. 306. Spreng. syst. veg. 2. p. 585.

Stem woody, erect or slightly flexuose, clothed with a brown more or less cracked bark; much branched: *branches* opposite, spreading, thickly clothed with unequal spreading villous white hairs. *Leaves* opposite, sessile, linearly lanceolate, acute, rugose, three-nerved at the base, reticulately veined underneath, clothed on both sides with a close short white pubescence, roughish to the touch, margins much undulate or curled. *Flowers* of a red purple, terminal, subcymose, nearly sessile, or with very short peduncles, 3 to 7-flowered. *Bractes* small, leaf-like, lanceolate, acute. *Peduncles* 1 to 3-flowered. *Pedicels* very short, villosely hairy. *Calyx* of 5 sepals, the 2 outer ones largest, leaf-like, ovate, acute, many nerved; the third narrower and scariose on one side, inner ones smaller, concave, scariose, taper-pointed. *Petals* 5, broadly obovate, imbricate nearly their whole length, edges crenulate. *Stamens* from 150 to 180, compact, surrounding the style: *filaments* smooth, pale yellow; *pollen* orange-coloured. *Style* pubescent, scarcely as long as the stamens. *Stigma* capitate, tuberculate.

This is a very pretty and distinct species, a native of the South of Europe, and if grown in a sheltered situa-

tion will stand the severity of our Winters without protection ; it varies considerably in the size of its leaves, and also in their being more or less curled, but it is readily recognized by the short stalks of the flowers ; the petals are also of a different sort of red from any other species, so that it makes a very pleasing variety ; it also makes a snug growing bushy plant, and its flowers are produced in succession from June to August, and are sometimes succeeded by ripe seeds. It succeeds well in the common garden soil ; or if grown in pots or on rock-work, a mixture of sandy loam and peat will suit it very well. Cuttings of it, planted under hand-glasses in Autumn, will strike root readily, but they will not strike so freely in Summer ; the young shoots must be taken for cuttings, and must not be planted too close together, or they will be apt to damp one another off ; plants may also be raised from seeds, which may either be sown as soon as gathered, or left till Spring ; they will succeed equally well, if transplanted thinly into pots when of a small size, that they may not miss their removal.

Our drawing was made from plants at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, last Summer.





CISTUS heterophyllus.

Various-leaved Rock-Rose.

Sect. I. ERYTHROCISTUS. *Supra*, fol. 3.

* Pedunculis unifloris, axillaribus vel terminalibus, solitariis, umbellatisve: stylo cylindrico sæpè staminibus longiore; stigmate capitato 5 sulcato. DC. prodr. 1. p. 264.

C. *heterophyllus*, foliis ovato-lanceolatis breviter petiolatis basi vaginantibus margine revolutis utrinque viridibus, pedunculis hirsutis foliosis unifloris 1-2-ternisve, petalis rotundato-obovatis basi imbricatis.

Cistus heterophyllus. *Desf. atl.* 1. p. 411. *t.* 104. *Pers. syn.* 2. p. 75. *DC. prodr.* 1. p. 264. *Hort. sub. lond.* p. 123. *Spreng. syst. veg.* 2. p. 534.

A stiff upright woody shrub, much branched: *branches* short and rigid, spreading, of a reddish brown colour, thickly clothed with a woolly pubescence. *Leaves* small, with short petioles, sheathing at the base, very variable, green on both sides, reticulately veined underneath, slightly hairy and ciliate, the nerves pubescent: lower ones round or ovately rounded, obtuse, the margins slightly revolute; upper ones lanceolate, more acute, and the margins much revolute. *Petioles* very short, winged, and fringed with long white hairs. *Flowers* large, terminating the branches, from 1 to 5, of a bluish rose-colour. *Peduncles* of a brownish red colour, very hairy and rough, one-flowered, with two leafy bractes about the middle of each. *Bractes* sessile, lanceolate, bluntish, hairy and strongly fringed. *Calyx* of 5 sepals, outer ones flat, cordately ovate, acute, rigid, strongly and numerously nerved underneath, hairy on both sides, and fringed with long white hairs; 2 inner ones concave, membranaceous, pubescent, much veined, and terminated with a sharp mucro. *Petals* 5, or sometimes increased to 6, obovate with rounded points, much crumpled, margins a little uneven, or slightly

crenulate, imbricate only at the base, and distinct from about the middle, of a bluish rose colour, inclining to purple, and a bright yellow spot at the base. *Stamens* numerous, surrounding the style, from 100 to 150: *filaments* smooth, pale yellow: *pollen* bright orange-coloured. *Germen* sericeous. *Style* smooth, about the length of the stamens. *Stigma* capitate, 5-lobed, pustulose.

Our drawing of this rare and very distinct species was taken from a fine plant at the Nursery of Messrs. Whitley, Brames, and Milne, in July last, in whose collection we have also met with some other very rare species; we think the present the most curious of any that we have yet seen; the plant has a tree-like appearance, with short stiff branches; and although its leaves are so small, the flowers are nearly as large as any of the genus, and are of a lively colour; those are produced from the beginning of June until the end of July: it is a native of uncultivated hills in Algiers, and therefore requires the protection of a frame or greenhouse in Winter; or if planted against a wall, and well covered with mats in severe frost, it will succeed very well; if grown in pots, it will thrive well in any rich light soil, or a mixture of sandy loam and peat will suit it very well; it does not strike freely from cuttings, the shoots being so short and hard that good ones are with difficulty procured; those should be taken off before too ripe, and planted under a hand-glass. Seeds are sometimes ripened, which is the best method of increasing it.





CISTUS creticus.

*Cretan Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra fol. 3.*** *Pedunculis cymosis aut 1-2-floris; stylo subnullo capitato staminibus brevior.*

C. creticus, foliis spathulato-ovatis rugosis scabris tomentoso-hirtis in petiolum brevem attenuatis margine undulatis, pedunculis subbinatis unifloris, sepalis acuminatis villosis, capsula pilosa.

Cistus creticus. *Linn. spec. 1. p. 738. Jacq. ic. rar. 1. t. 95. Flor. græc. t. 495. Willd. spec. pl. 2. p. 1186. Pers. syn. 2. p. 75. Hort. Kew. edit. 2. v. 3. p. 306. DC. prodr. 1. p. 264. Spreng. syst. 2. p. 584.*

A handsome upright dwarf bushy Shrub: *branches* spreading, thickly clothed with unequal entangled hairs, the younger ones with spreading villous ones. *Leaves* spathulately ovate, bluntly rounded, attenuated into a sort of petiole towards the base, the lower ones much broader than the upper ones, reticulately veined, rugose, undulate at the margins, of a pale whitish green, or somewhat canescent, tomentosely hairy, the hairs short and in irregularly stellate fascicles. *Flowers* terminal, solitary, or in pairs, of a purplish red. *Peduncles* solitary, or sometimes binate, densely clothed with woolly hairs, generally one or two flowered. *Calyx* of 5 sepals, villosely hairy: *sepals* ovate, concave inwards, tapering to a long slender point, strongly nerved with purple veins: inner ones broadest, more concave, and membranaceous at the edges. *Petals* 5, imbricate at the base, the points distinct, obovate, much undulate and crumpled, nerved from the base, of a pale reddish purple, with a pale yellow mark on each at the base. *Stamens* numerous: *filaments* pale yellow, smooth, unequal in

length : *pollen* golden yellow. *Germen* densely clothed with woolly hairs. *Style* scarcely any. *Stigma* capitate, flattened, quite hiding the style, tuberculate.

The plant that we originally gave under this name is not correct, but proves to be the *C. undulatus* of Dunal in Decandolle's *Prodromus* ; we therefore take the present opportunity of setting it right, by giving a figure of the real species, with a fresh leaf of letter-press, for the one that we had given for it at folio 63 : the present plant is readily distinguished from that, and all others that are related to it, by its very short style, which is quite hid by its large stigma, and brings it in the second division of the section *ERYTHROCISTUS*, with *C. purpureus*, *C. cymosus*, and *C. parviflorus*, from all of which it is distinguished at first sight.

Being a native of Greece, the present species is rather tender, and is very apt to be killed, when exposed to the open air of our climate in Winter ; this will partly account for its present scarcity ; and being so much like *C. villosus* and *C. undulatus* in common appearance, it is often confused with these species in collections ; and the *C. purpureus* is generally sold for it at the Nurseries, which is also a native of Crete ; but the fine dark spots at the base of its petals, has rendered it an object of more care than most of the other species, that are not so showy.

We believe the present species is scarcely to be met with at any Nursery, except that of Messrs. Whitley, Brames, and Milne, at Fulham, where there are a few plants of it.

[illegible]



CISTUS purpureus.

*Purple-flowered Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra*, fol. 3.

** Pedunculis cymosis; stylo subnullo capitato staminibus brevior.

C. purpureus, foliis oblongo-lanceolatis acutis obtusisve rugosis reticulato-venosis margine undulatis, petiolis brevibus pilosociliatis vaginantibus, pedunculis brevibus 1-2-ternisve aut subcymosis, sepalis acuminatis exterioribus minoribus, petalis obovato-cuneatis valde imbricatis.

Cistus purpureus. *Lam. dict.* 2. p. 14. *Pers. syn.* 2. p. 75. *Ker. Bot. reg.* t. 408. *DC. prodr.* 1. p. 264. *Swt. hort. sub. lond.* p. 123. *Spreng. syst. veg.* 2. p. 584.

Stem shrubby, erect, much branched: *branches* erect or ascending, thickly clothed with a rusty pubescence. *Leaves* opposite, oblong and obtuse, nearly flat, others oblongly lanceolate, or narrowly lanceolate and acute, with undulate margins, all tapering at the base, more or less rugose, reticulately veined, densely pubescent on the lower side, and more thinly on the upper. *Petioles* short, connected at the base and sheathing the stem, hairy. *Flowers* terminal, from 1 to 6 on short peduncles. *Bractes* sessile, leaf-like, broad and concave at the base, where they are connected, and terminating in an acute point, pubescent. *Pedicles* short, clothed with tufts of short hairs, and longer ones intermixed. *Calyx* of 5 sepals, clothed with fascicles of short hairs, fringed and taper-pointed: 2 outer ones smallest and narrowest, cordately ovate; inner ones cordate, concave, with membranaceous margins. *Petals* 5 or 6, obovate or obovately wedge-shaped, very much imbricate, more or less crumpled, of a bright reddish purple, with a yellow spot at the base, above which is a large dark velvet mark, surrounded with red, and slightly branched.

Stamens numerous, about 150, *filaments* smooth, pale yellow: *pollen* orange-coloured. *Germen* densely clothed with close-pressed silky hairs. *Style* very short. *Stigma* large, capitate, 5-lobed, papillose.

This very fine species is generally known in the collections about London by the name of *C. creticus*; but that is a very different plant, and one that we have not met with in any collection last Summer; that is readily distinguished from any other, by its dwarf bushy growth, and generally bearing only one or two flowers on each peduncle, which terminates the branches; the petals are much imbricate, and the colour of a reddish purple, without any dark spots at the base; it is much nearer related to *C. villosus* than to the present plant, and we have seen specimens of *C. villosus* in Mr. Lambert's Herbarium that were received from Crete, under the name of *C. creticus*.

According to M. Decandolle, the present species is a native of the Levant, and is rather too tender to endure our severest Winters without protection; but it will succeed well against a wall, so as to be covered up with mats in severe frost; and in the warmer counties, such as Devonshire, we believe it would survive without any protection whatever: plants of it, if kept in pots, and preserved in frames all the Winter, and then turned in the borders in Spring, will make a fine appearance, as it grows very fast, and makes a handsome shrub; it will succeed well in the common garden soil, or if grown in pots, a mixture of sandy loam and peat will suit it very well. Young cuttings, planted under hand-glasses in August or September, will soon strike root; but the glasses must not remain on them long after they are rooted, or they will be liable to damp off; they will succeed best if potted off, and preserved in frames through the Winter. Drawn at Mr. Colvill's Nursery, last Summer.





CISTUS cymosus.

*Cyme-flowered Rock-Rose.*Sect. I. ERYTHROCISTUS. *Supra fol. 3.*

** Pedunculis subcymosis: stylo subnullo capitato staminibus brevior.

C. cymosus, foliis lato-ovatis apice contortis acutiusculis subtus rugosis incanis petiolatis, petiolis basi dilatatis sulcatis subvaginantibus, pedunculis cymosis 5-10-floris incanis axillaribus terminalibusve. *Dunal in DC. prodr. 1. p. 265.*

*Cistus cymosus. DC. prodr. 1. p. 265. Swt. hort. brit. p. 34. n. 13.**Cistus incanus. Smith in Sibthorp's Flora Græca. t. 494. nec aliorum.*

A very handsome small bushy shrub, much branched, the branches ascending, rather short and slender, clothed with a rough hairy pubescence. *Leaves* petiolate, broadly ovate, scarcely acute, the points more or less twisted, underneath rugose and reticulately veined, clothed with a short thin hoary canescence, and short hairs intermixed. *Petioles* dilated at the base and clasping the stem, somewhat winged, more or less tinged with red, and channelled on the upper side. *Flowers* of a lively red, middle sized or smallish, produced in numerous many-flowered cymes. *Peduncles* hairy and canescent. *Bractes* oblong, bluntish. *Pedicles* hairy and canescent. *Calyx* of 5 sepals, that are ovately lanceolate and taper-pointed, veined with red lines, hoary and clothed with shortish hairs. *Petals* 5, obcordate, imbricate, of a bright red, in some plants pale lilac, more or less crumpled from their thin texture. *Stamens* numerous: *filaments* yellow: *pollen* orange-colour. *Germen* tomentose. *Style* very short, quite hid by the capitate stigma, which is slightly 5-furrowed, and papillose.

The present handsome and numerous flowered species is a native of the Levant, and has been often confused with *C. incanus*, under which name it is published in the Flora Græca, and, according to Dunal, is cultivated by the same name in M. Cels' Nursery at Paris; it is nearer related to *C. villosus*, but is readily distinguished from both by its sessile stigma, which brings it much nearer to *C. parviflorus*, to which it is certainly nearest related.

As the present plant is a native of the Levant, it is rather tender, and liable to be killed by the frost, if not covered, or protected in a frame or greenhouse, by which means it is scarce, and it is generally confused with some of the more common species. Dunal does not appear to know of what country it is a native, having only seen cultivated plants of it in M. Cels' garden. It may be grown with good success in the same manner as recommended for *C. parviflorus*, and *C. purpureus*, two species with which it agrees in its nearly sessile stigma; a light sandy soil suits it best, or, if grown in pots, an equal portion of light turfy loam, peat, and sand, will suit it very well; and young cuttings, planted under hand-glasses in August or September, will strike root readily, but a little air must be given them occasionally to dry up the moisture, or they will be liable to damp off; as soon as they are properly rooted, they must be potted off, and placed in a close frame for a few days, till they have made fresh root, when they must be hardened to the air by degrees.





CISTUS parviflorus.

Small-flowered Rock-Rose.

Sect. I. ERYTHROCISTUS. *Supra, fol 3.*

** Pedunculis subcymosis; stylo subnullo capitato staminibus brevior.

C. parviflorus, foliis ovatis acutis subtomentosis basi trinerviis reticulato-venosis petiolatis: petiolis basi connatis subvaginantibus, pedunculis subcymosis terminalibus, calycibus acutis villosis, petalis distinctis obcordatis calyce duplo longioribus.

Cistus parviflorus. *Lam. dict.* 2. p. 14. *Pers. syn.* 2. p. 75. *DC. prod.* 1. p. 264. *Swt. hort. brit.* p. 34. n. 8. *Spreng. syst.* 2. p. 584.

Stem shrubby, much branched: *branches* spreading, rather slender, densely clothed with a white tomentum. *Leaves* ovate, acute, somewhat twisted, thinly clothed with a white tomentum, 3-nerved at the base, rugose, reticulately veined, petiolate. *Petioles* connected at the base, and sheathing the stem, tomentosely hairy. *Flowers* more or less cymose, terminal, of a pale rose colour. *Bractes* ovate, acute, concave. *Peduncles* 1 to 3-flowered, villosely hairy. *Calyx* of 5 sepals, villous, acute, outer ones narrowest, ovately oblong, inner ones ovate, concave, with membranaceous margins. *Petals* 5, more than double the length of the calyx, obcordate, distinct, not imbricate, slender at the base, pale rose-coloured. *Stamens* about 30, short, but overtopping the stigma; *filaments* smooth, pale yellow: *pollen* bright yellow. *Germen* tomentose. *Style* very short. *Stigma* large, capitate, deeply 5-channelled, papillose.

For the opportunity of giving a figure of this very rare and handsome plant, we are obliged to Mr. William Anderson, Curator of the Apothecaries' Garden at Chelsea, who kindly informed us when it was in bloom; we are certain that it is the species for which

we have given it, having seen many fine specimens of it in Mr. Lambert's Herbarium, which were collected in Crete, of which country it is a native; most authors have described it as bearing only three flowers on the peduncle, but amongst Mr. Lambert's specimens were several producing the flowers in a sort of cyme, as in our figure. In the same collection, and from the same country, were two other species, one marked *C. salvifolius*, the other *C. monspeliensis*, both of which were different from the original species; and we have since found living plants of both at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, and have procured fine figures of them; they were most probably introduced by Dr. Sibthorp, when he returned from Greece, and have been in our collections ever since, without being ever noticed.

As the present species is a native of Crete, it will require protection in severe weather, either to be kept in a greenhouse or frames, or to be planted against a south wall or in rock-work, and to be covered with mats or some other covering in severe frost, but to be exposed as much as possible in mild weather: a light sandy soil will suit it best; or if grown in pots, an equal mixture of light turfy loam and peat will suit it very well. Young cuttings taken off at a joint, and planted under hand-glasses, in September or October, will soon strike root; it may also be raised from seeds, which will ripen occasionally.

The present species, and also *C. purpureus*, belong to the second division of M. Decandolle's section ERYTHROCISTUS, containing those with a very short or scarcely any style.





CISTUS latifolius.

Broad-leaved Rock-Rose.

Sect. II. LEDONIA. *Supra*, fol. 1.

§ 1. *Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.*

** *Pedunculis bracteatis, basi bracteolis caducis parvulis concavis coriaceis subluteis decussatis, infra medium 2 oppositis majoribus.*

C. latifolius, foliis petiolatis lato cordatis acutis margine crispato-undulatis denticulatis ciliatis, pedunculis bracteatis longis subcymosis villosopilosis, sepalis lato-cordatis villosis, petalis imbricatis.

Cistus latifolius. *Swt. hort. brit. p. 34. n. 23. Supra, fol. 8. in obs.*
Cistus populifolius, α. major. DC. prodr. 1. p. 266.

A large branching shrub, with brown glossy bark : *branches* spreading, crooked, when young, clothed with long white hairs, which drop off as the shoots advance in age, they are then smooth and glossy. *Leaves* opposite, nearly as broad as long, cordate and overlapping at the base, acute, the points reflexed, underneath strongly nerved, the nerves much branched, reticulately veined, more or less hairy on both sides, margins curled or much undulate, and toothed with numerous small teeth, also ciliate, of a pale green colour. *Petioles* stout, channelled on the upper side and rounded on the lower, widened and sheathing the stem at the base, margins purple, fringed. *Peduncles* long, axillary, bracteate at the base, subcymose, in our specimens from 3 to 5-flowered, lower part glossy, upper part villosely hairy. *Bractes* decussate, or crossing each other, falling before the flowers expand; lower ones small, oblong, concave, keeled, hairy inside, fringed, bluntish, but terminated with a small point: upper ones larger and more acute, also keeled, villous inside and fringed with white hairs. *Pedicles*

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cylindrical, villosely hairy, nodding before the flowers expand, then becoming erect. *Calyx* of 5 sepals, densely clothed with spreading villous white hairs; outer sepals broadly cordate, rounded, with a short point, of a brownish colour, margins slightly reflexed; inner ones membranaceous, terminated by a sharp, rigid, brown point. *Petals* 5, or sometimes increased to 6, much imbricate, obcordate, more or less wrinkled, white, with a yellow spot at the base. *Stamens* numerous, from 120 to 150, overtopping the stigma: *filaments* smooth, straw-coloured: *pollen* orange-coloured. *Germen* sericeous. *Stigma* large, sessile, capitate, lobed, and papillose.

Of the present very rare species we have only seen one living plant, which was at the Nursery of Mr. John Lee of Hammersmith, from which our drawing and description were made last June: we believe that no person who ever saw the present species and the *C. populifolius* of Cavanilles growing together, would ever consider them as varieties of the same species; we consider them as distinct as any two species in one section had need be. We observed some fine specimens of it in Mr. Lambert's Herbarium, where it was also confused with *C. populifolius*. Being a native of Barbary, we suspect it will also require some protection in Winter, either to be planted against a south wall in rich soil, and to be covered with mats in severe weather, or to be protected in a frame or in the greenhouse in Winter; when it becomes more plentiful, plants of it may be kept in pots in the frames in Winter, and turned out in the borders in Spring, where they will produce their flowers in greater perfection than if grown in pots: being a large robust growing shrub, it will require stronger soil than the weaker growing sorts; a mixture of two-thirds loam and one-third peat will be a proper soil for it when grown in pots. Young cuttings taken off at a joint, the latter end of Summer, will soon strike root, if planted under hand-glasses.





CISTUS populifolius.***Poplar-leaved Rock-Rose.***Sect. II. LEDONIA. *Supra, fol. 1.*§ 1. *Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.*** *Pedunculis bracteatis, basi bracteolis caducis parvulis concavis coriaceis subluteis decussatis, infra medium 2 oppositis majoribus.*

C. populifolius, foliis petiolatis cordatis acuminatis rugosis lævibus margine undulatis, floribus cymosis, pedunculis bracteatis piloso-pubescentibus, bracteis oblongis acutis carinatis, sepalis acuminatis nitidis viscosis, petalis patentibus.

Cistus populifolius. *Linn. spec.* 736. *Cav. ic.* 3. p. 8. t. 215. *Willd. sp. pl.* 2. p. 1182. *Pers. syn.* 2. p. 74. *Hort. Kew. ed.* 2. v. 3. p. 303. *Spreng. syst.* 2. p. 586.

Cistus populifolius. β *minor*. *DC. prodr.* 1. p. 266.

A large strong-growing shrub, with stiff spreading branches: *branches* clothed with a brown glossy bark, slightly viscous, and scarcely pubescent. *Leaves* petiolate, cordate, tapering to a point, reticulately veined, rugged and uneven, without pubescence, of a dark green colour, margins undulate, minutely denticulate. *Petioles* rather long, widened and fringed at the base, clasping the stem, channelled on the upper side, and rounded on the lower, slightly pubescent, and spotted with numerous very small black warts or scales. *Flowers* large, white, cymose, nodding before expansion, afterwards becoming erect. *Peduncles* bracteate, pubescent. *Bractes* crossing each other, oblong, acute, keeled, concave, fringed, of a reddish purple; *lower ones* smallest. *Pedicels* short, thinly pubescent, rather viscous. *Calyx* of 5 sepals, the 2 outer ones largest, cordate, acute, smooth and glossy, viscous, slightly pubescent, sides a little reflexed, inner ones smaller, more taper-pointed and membranaceous. *Petals* 5, white, with a light yellow spot at the base,

obcordate, crumpled, imbricate at the base, at first cup-shaped, afterwards reflexed. *Stamens* numerous, from 100 to 130. *Germen* densely villous. *Style* scarcely any. *Stigma* capitate, slightly 5-lobed, granular.

A strong robust species, native of the South of Europe, and is rather tender, as it will sometimes be injured in severe Winters if not protected, but it stands our milder ones very well in the open air. The difference between our present plant and *C. latifolius*, fol. 15, may be readily perceived by a comparison of our figures; and we are informed by M. Lagasca, that the latter species is also a native of Spain, as well as Barbary, and that he had always considered it specifically different from our present plant.

Our drawing was taken last Summer from plants at the Nursery of Mr. John Lee, of Hammersmith; it thrives well in the common garden soil, and if planted in a sheltered situation, or near a wall, might be readily protected by mats in severe weather: if grown in pots, a mixture of light turfy loam and peat will suit it very well, and they may be protected in a frame in Winter; its flowers are produced in May and June, and seeds are very frequently ripened, which may be sown and managed in the same manner as recommended under *C. crispus*. Cuttings also strike root freely, if planted under hand-glasses in September or October, the cuttings to be made from the young shoots; as soon as rooted, they should be potted separately in small pots, which must be placed in a close frame until they have made fresh roots; they may then be hardened to the air by degrees, and will need the protection of a frame during the Winter.





CISTUS asperifolius.*Rough-leaved Rock-Rose.*

Sect. II. LEDONIA. *Supra fol. 1.***§. 1. *Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpiùs cordatis acuminatis; capsulis 5-locularibus.****** *Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.***

C. *asperifolius*, foliis subsessilibus ovato-lanceolatis acutis trinerviis rugosis glabriusculis margine undulatis subdenticulatis ciliatis: subtus reticulato-venosis; nervis venisque asperis, floribus cymosis, pedunculis calycibusque hirsutis, petalis imbricatis.

Stem erect, much branched, forming a strong bushy shrub: *branches* spreading, erect, or ascending, very rough, thickly clothed with long spreading hairs, intermixed with numerous very short rigid ones. *Leaves* opposite, sessile or nearly so, ovately lanceolate, acute, rugged, very much undulate at the margins, that are toothed with numerous minute teeth and fringed, appearing smooth till examined by a glass, which shows that they are clothed with numerous very short hairs on the upper side, and longer ones underneath, particularly on the nerves and veins: underneath 3-nerved from the base, where they are connected, the nerves much branched and reticulately veined, the nerves and veins very rough. *Flowers* white, in terminal cymes. *Bractes* ovate, or ovately lanceolate, acute, hairy, and fringed. *Peduncles* and *pedicles* cylindrical, very hairy. *Calyx* of 5 sepals; the outer sepals broadly cordate, shortly acuminate, hairy and fringed: inner ones ovate, membranaceous, terminated in a long slender point. *Petals* 5, spreading flat, imbricate, broadly

obovate or obcordate, with a yellow spot at the base of each. *Stamens* about 100, spreading round: *filaments* smooth and yellow, unequal in length; *anthers* yellow. *Germen* pubescent. *Style* very short. *Stigma* large, capitate, 5-furrowed, papillose, covering the style. *Capsule* oblong, pubescent, 5-celled. *Seeds* conical, brown and glossy, about the size of rape seed.

We do not find any description that agrees with the present plant, which may probably be a garden production; if so, it is probably intermediate between *C. laxus* and *C. oblongifolius*, or perhaps the latter with *C. Cupanianus*; from the two first it differs in the broad base of its leaves, which brings it nearer to the latter; the habit of the plant, and its mode of flowering, is nearest to *C. oblongifolius*: it forms a handsome, strong, upright, evergreen shrub, and is quite hardy, producing its flowers all the Summer, and till late in Autumn, when planted in the open ground, thriving well in a rich light soil; and young cuttings, planted under hand-glasses in August, strike root freely; it may also be raised from seeds.

Our drawing was made last Summer from a plant at the Nursery of Mr. Colvill, King's-road, Chelsea.





CISTUS Cupanianus.

*Heart-leaved Rock-Rose.*Sect. II. LEDONIA. *Supra fol. 1.*§. 1. *Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.** *Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.*

C. Cupanianus, caule erecto, foliis petiolatis cordato-ovatis acutis rugosis reticulato-venosis supra scabris subtus fasciculato-pilosis margine fimbriatis, pedunculis pilosis 2-3-floris, sepalis villosis acuminatis, petalis imbricatis.

Cistus Cupanianus. *Presl. ex Spreng. syst. v. 4. par. 2. p. 206.*

Stem shrubby, upright, much branched: *branches* spreading, when young slightly viscous, and clothed with long spreading white hairs, which wear off by age, and they then become smooth and brown. *Leaves* opposite, petiolate, cordately ovate, acute, flat, more or less undulate at the margins, roughish, occasioned by the little tubercles on which the fascicles of hairs are fixed, strongly pennately nerved underneath, rugose, reticulately veined, of a dark green, and nearly smooth on the upper side, paler underneath, and thickly clothed with fascicles of hairs, as are the margins, where they are seated on little tubercles, which gives the appearance of being denticulate or fimbriate. *Petioles* furrowed on the upper side, and rounded on the lower, broadest at the base, hairy. *Peduncles* longish, axillary, 2 or 3-flowered, thickly clothed with bunches of hairs spreading in various directions. *Bractes* 4 at the base of the peduncle, lanceolate, acute, opposite, crossing each other, and a small deciduous one at the base of the pedicles. *Pedicles* hairy, nodding before the ex-

pansion of the flowers, erect when in bloom. *Calyx* of 5 sepals, thickly clothed with rigid hairs, and shorter down underneath; *sepals* taper-pointed, outer ones cordate; inner ones oblong or lanceolate, with membranaceous margins. *Petals* 5, obcordate, narrow at the base, imbricate, flat, or slightly crumpled. *Stamens* about a hundred, spreading flat; *filaments* unequal in length, smooth, yellow: *pollen* golden yellow. *Germen* sericeous. *Stigma* very large, capitate, papillose, nearly sessile, and hiding the short Style.

According to Sprengel, the present plant is a native of Sicily, and it is at present rather scarce in our collections. It is nearly hardy, requiring protection only from the very severest frosts, and in sheltered situations would require no protection at all. It is nearest related to *C. salvifolius* and *C. corbariensis*, but is of stronger growth than either of these, and of a different habit; it is readily distinguished from the former by its cordate, acute leaves, and from the latter by its larger, broader, softer, and more hairy leaves, also by the shape and colour of its bractes, and different mode of growth. It thrives well in a light sandy soil, or if planted in the ground, the common garden soil will suit it very well; young cuttings, planted under hand-glasses, in August, strike root readily.

Our drawing was made from a plant, at the Nursery of Messrs. Whitley, Brames, and Milne, in June last.





CISTUS oblongifolius.

Oblong-leaved Rock-Rose.

Sect. II. LEDONIA. *Supra fol. 1.*

§. 1. *Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.*

* *Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.*

C. oblongifolius, caule fruticoso erecto; ramis hispido-villosis, foliis breviter petiolatis oblongo-lanceolatis obtusis margine pubescentibus et undulatis subtus venosis, pedunculis cymosis, petalis concavis valde imbricatis.

A large upright strong-growing Shrub, producing long straightish stiff branches, which are densely clothed with short villous down and long rigid hairs intermixed. *Leaves* shortly petiolate, oblong, bluntish, reticulately veined, upper side smooth and glossy, under side paler, margins pubescent, and more or less undulate. *Petioles* very short, clasping the stem at the base, of a reddish brown, *Flowers* large, white, in a cymose panicle. *Bractes* sessile, crossing each other; lower ones leaf-like, oblongly-lanceolate, bluntish; upper ones ovate, concave, acute, strongly nerved, submembranaceous, fringed. *Pedicles* unequal in length, nearly cylindrical, slightly viscous, thickly clothed with short spreading hairs and a few long ones intermixed. *Calyx* of 5 sepals, 2 outer ones much the largest, bracte-like, cordate, acute, striate, villosely hairy, margins fringed, reflexed: inner ones narrower, more membranaceous, and taper-pointed, also villous. *Petals* 5, white, rather cupped, much imbricate, nearly round, with a yellow spot at the base of each. *Stamens* nume-

rous, about 100, spreading, far overtopping the stigma: *filaments* smooth, yellow. *Germen* densely villous. *Style* very short, scarcely any. *Stigma* very large, capitate, rugged.

The present plant, if allowed, will form a strong handsome evergreen shrub, if planted in the open border, and appears to be quite hardy, a plant of it having stood in our garden in the open border for the two last Winters, without a single leaf being injured. It appears to be a very distinct species, but we cannot find any description agree with it in any of the books that we have examined, though we know of no species with which it can be confounded; we were at first inclined to believe it to be *C. longifolius* of Lamarck, but it has certainly but little affinity with that species, which we believe to be not at all different from *C. laxus*. Being so hardy, it is well worth cultivating in every Shrubbery, where it will flower the greater part of the Summer. Cuttings of it strike root readily, planted under hand-glasses, in August or September, or it may be raised from seeds, which ripen plentifully.

Our drawing was made from strong plants in the Nursery of Mr. Colvill, of the King's-road, Chelsea.





J. Hunt del.

Painted by J. H. Gregory 1825

J. W. W. & Co.

CISTUS laxus.

Broad waved-leaved Rock-Rose.

Sect. II. LEDONIA. *Supra*, fol. 8.

§ 1. Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.

** Pedunculis bracteatis, basi bracteolis caducis parvulis concavis coriaceis subluteis decussatis, infra medium 2 oppositis majoribus.

C. laxus, foliis breviter petiolatis ovato-lanceolatis acuminatis margine undulatis subdenticulatis subglabris: summis hirtis, floribus cymosis, pedunculis calycibusque hirsutis, petalis obcordatis valde imbricatis.

Cistus laxus. DC. *prodr.* 1. p. 265. *Hort. Kew. ed. 2. v. 3. p. 305.*

Willd. enum. 2. p. 568. *Link enum.* 2. p. 74. *Swt. hort. brit.* p. 34. n. 20. *Spreng. syst. veg.* 2. p. 586.

Stem shrubby, erect, not much branched: *branches* erect, or slightly spreading, with a green glossy bark: the young shoots thickly clothed with short woolly down, and long spreading hairs intermixed, more or less viscous. *Leaves* shortly petiolate, ovately lanceolate, taper-pointed, margins undulate, and slightly denticulate, the teeth terminated by hairs, strongly 3-nerved from the base, reticulately veined on the lower side, and rugose on the upper: old leaves nearly smooth, young ones hairy on both sides and slightly viscous. *Petioles* clasping the stem at the base, but not connected, channelled on the upper side, furrowed on each side, and keeled at the back. *Peduncles* axillary, villosely hairy, terminated by a paniculate cyme, clothed with small oblongly lanceolate, concave, acute, keeled bractes at the base, which are deciduous, and fall off before the expansion of the flowers: *upper bractes* larger, sessile, oblongly lanceolate, acute, concave, hairy, and fringed. *Pedicles* slender, cylindrical, villosely hairy. *Calyx* of 5 sepals, very hairy: 2 outer ones largest, cordate,

acute, the sides more or less turned back, much fringed: inner ones narrower, ovate, concave, taper-pointed, the margins scariose or membranaceous. *Flowers* rather cupped, of a paper white. *Petals* 5, obcordate, very much imbricate, more or less crumpled, with a light yellow spot at the base. *Stamens* about 80, spreading, the inner ones longest: *filaments* smooth, slender, of a pale yellow: *pollen* bright yellow, inclining to orange. *Germen* densely clothed with close pressed hairs. *Style* very short. *Stigma* large, capitate, slightly 5-lobed, tuberculate.

Our drawing and description of this fine species were taken from plants kindly communicated to us from the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, in June last; we have no doubt but it is the *C. laxus* of M. Decandolle, although it belongs to the same division of the section as *C. populifolius* and *longifolius*, bearing small deciduous bractes at the base of the peduncles; we believe the present plant, from the description, to be what is meant by Professor Sprengel, for *C. longifolius*, in his Systema Vegetabilium, but very different from Decandolle's *C. longifolius*, of which we also have a drawing in our possession: the present plant is quite hardy, or only requires slight protection in very severe frost, thriving well in the common garden soil, but prefers rather a dryish situation; it may also be grown in pots, which can be protected in a frame in severe frost, and may then be planted into the borders in spring; if grown in pots, the best soil is an equal mixture of light turfy loam, and peat. Young cuttings taken off at a joint, and planted under hand-glasses in autumn, will strike root readily; it may also be increased by layers or seeds.





CISTUS corbariensis.

Mountain Rock-Rose.

Sect. II. LEDONIA. *Supra*, fol. 1.

§ 1. Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpiùs cordatis acuminatis; capsulis 5-locularibus.

* Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.

C. corbariensis, foliis petiolatis subcordatis ovatis acuminatis margine fimbriatis utrinque rugosis leviter glutinosis, pedunculis longis 1-5-floris, petalis basi imbricatis apice patentibus.

Cistus corbariensis. *DC. prodr.* 1. p. 265. *Pers. syn.* 2. p. 74.

Hort. sub. lond. p. 123. *Link enum.* 2. p. 73. *Swt. hort. brit.* p. 34. n. 15. *Spreng. syst. veg.* 2. p. 586.

Cistus hybridus. *Pourr. chlor. narb.* p. 36. *nec Vahl.*

Cistus salrifolius β. *DC. fl. fr.* 4. p. 813.

Stem shrubby, erect, much branched, clothed with a brown glossy bark, more or less warted: *branches* opposite, spreading, thickly clothed with leaves, smooth or slightly pubescent. *Leaves* opposite, cordate at the base, ovate, tapering to a point, points a little reflexed, reticulately nerved and rugose, of a dark glossy green on the upper side, and stellately pubescent underneath, slightly glutinous, margins fimbriate with tufts of short hairs. *Petioles* clothed with a stellate pubescence, and fringed with longer hairs, channelled on the upper side and rounded on the lower, widened at the base and clasping the stem. *Peduncles* 1 to 5-flowered, axillary, slender, stellately pubescent, nodding before the flowers expand, then becoming erect. *Bractes* deciduous, cordately ovate, acute, bluntly keeled, pubescent and ciliate. *Pedicles* thickly clothed with a starry pubescence, at first nodding, then becoming erect. *Calyx* of 5 sepals; outer ones largest, cordate, acute, the margins a little recurved; inner ones membranaceous, concave, mucronate. *Petals* 5, spreading flat,

imbricate at the base, the points spreading, obovate or obcordate, slightly crumpled, the margins slightly curved upwards, white with a yellow spot at the base, and tinged with red at the points. *Stamens* about 100, spreading: *filaments* short, smooth, straw-coloured: *anthers* 2-celled, attached near the base by their back to the filaments: *pollen* orange-coloured. *Germen* sericeous. *Stigma* very large, capitate, papillose, nearly sessile, and hiding the style.

Our drawing of this plant was taken at the Nursery of Mr. Colvill, in June last; it is one of the hardiest species of the genus, thriving well in the common garden soil, and in any situation where it is not too moist, continuing to bloom for about two months, and each day covered with a profusion of handsome white flowers, whose margins are tinged with rose; the rose-coloured buds are also very pretty, before the flowers expand: plants grown in pots make very handsome snug bushes, and have a lively appearance when in bloom; a mixture of loam and peat suits it very well; and young cuttings, planted under hand-glasses, root without difficulty.

This species is a native of mountains in the south of France and Spain, and is sold in the nurseries under the name of *C. populifolius minor*, but is in reality much nearer related to *C. salvifolius* than to that species; the *C. populifolius* β *minor* of Decandolle, which is the *C. populifolius* of Cavanilles, is the *C. populifolius major* of the Gardens, but is very different from *C. populifolius* α *major* of Decandolle, a native of Mauritania, of which we have a drawing taken from a plant at the Nursery of Mr. Lee, at Hammersmith, the only one that we have ever seen in a living state; but fine specimens of it are preserved in Mr. Lambert's Herbarium; it is certainly a very different species from *C. populifolius*, and we believe no person would consider them as belonging to the same that had an opportunity of comparing them when growing together; we therefore propose to name it *C. latifolius*.





CISTUS acutifolius.

Acute-leaved Rock-Rose.

C. acutifolius, foliis cordato-ovatis acutis basi trinerviis reticulato-venosis utrinque pubescentibus, ramis virgatis diffusis subprostratis, pedunculis tomentosis subtrifloris, sepalis cordatis acutis nitidis subpilosis ciliatis, petalis obcordatis basi imbricatis.

Cistus salvifolius β *humifusus*. *DC. prodr.* 1. p. 265?

Stem shrubby, branched, spreading: *branches* long and slender, scarcely strong enough to support their own weight, when young clothed with a short tomentum, and stellate bunches of hairs, more or less of a purple tinge, older ones becoming rough, by the little tubercles on which the bunches of hairs have been seated. *Leaves* ovate, acute, sometimes cordate and sometimes rounded at the base, spreading flat when full grown, afterwards becoming undulate and the sides folded inwards, slightly rugose, 3-nerved at the base, reticulately veined, clothed on both sides and the margins with numerous tufts of short hairs, upper side of a darkish green, paler underneath: young leaves of a hoary appearance, and undulate. *Petioles* short, dilated at the base, channelled on the upper side, and convex below, hairy. *Peduncles* axillary, generally 3-flowered, rough, clothed with a short tomentum and numerous little tufts of hairs. *Bractes* ovate, acute, opposite, besides some small ones at the base of the pedicles that are deciduous. *Pedicles* cylindrical, nodding before the flowers expansion, afterwards erect, tomentosely hairy. *Calyx* of 5 sepals, more or less purple, glossy, a little hairy and fringed, acute, outer ones broadly cordate, inner ones ovate. *Petals* 5, obcordate, white, yellow at the bottom, imbricate at the base, the points distinct. *Stamens* numerous, spread-

ing, unequal in length: *filaments* yellow. *Capsule* large, glossy, clothed with short hairs. *Stigma* large, sessile, capitate, tuberculate.

This is probably the plant meant by M. Decandolle as *C. salvifolius* β *humifusus*, as it is the most trailing of any of the genus that we are acquainted with; by which character, its slender shoots, and acute leaves, it is readily distinguished from that species and all others, approaching nearer to *C. Cupanianus*, but that is a much stronger upright growing plant, with much larger leaves, and of a brighter green; we have therefore no doubt but the present is as good a species as any of the others. It is a free growing but dwarf plant, quite hardy, and thrives well in a light sandy soil, continuing to flower successively nearly all the Summer, and ripens its seeds; young cuttings, planted under hand-glasses in Autumn, strike root readily.

Our drawing was made from a plant, at the Nursery of Mr. Colvill, King's-road, Chelsea.





CISTUS salvifolius.

*Sage-leaved Rock-Rose.*Sect. II. LEDONIA. *Supra fol. 1*

§ 1. Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.

* Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.

C. salvifolius, foliis petiolatis ovatis obtusis rugosis subtùs tomentosis, pedunculis longis tomentoso-albicantibus unifloris supernè articulatis solitariis. *DC. prodr. 1. p. 265.*

Cistus salvifolius. *Linn. spec. 738. Willden. sp. pl. 2. p. 1184. Pers. syn. 2. p. 75. Cavan. ic. 2. p. 31. t. 137. Jacq. coll. 2. p. 120. t. 8. Spreng. syst. 2. p. 586. Smith Flor. græc. t. 497.*

Stem shrubby, compact, much branched; *branches* erect or spreading, densely clothed with bunches of woolly hairs when young, but losing them and becoming rough when older, the roughness occasioned by the little tubercles on which the hairs have been seated. *Leaves* petiolate, ovate, obtuse or rounded at the points, becoming narrow towards the base, more or less rugose, reticulately veined, clothed with fascicles of short hairs on the upper side, and of woolly ones underneath, of a pale green colour, hoary when young, margins sometimes a little undulate, clothed all round with stellate tufts of hairs. *Petioles* short and broadish, channelled on the upper side, and rounded below, green or sometimes purple, slightly-winged. *Peduncles* axillary, jointed, one-flowered, densely clothed with short woolly hairs. *Bractes* 2 or 4 near the base of the peduncle, opposite, broadly lanceolate or ovate, acute. *Calyx* of 5 sepals, tuberculately rough, clothed with short hairs, and fringed with stellate bunches: 3 outer ones broadly cordate, acute, spreading at the points: the 2 inner ones ovate, concave, taper-pointed.

Petals 5, white, imbricate at the base, obcordate. *Stamens* about 100 : *filaments* unequal in length, spreading, yellow : *pollen* yellow. *Germen* clothed with a short thin pubescence. *Stigma* sessile, large, capitate, granular.

A great many different species are sold by the name of *C. salvifolius* at different Nurseries, scarcely any of the Nurserymen knowing the real plant, though it is very readily distinguished from all others, by its solitary one-flowered jointed peduncles, and its obtuse leaves, that are not cordate at the base, and it cannot be easily confused with any other. It is a native of several parts of Europe, and succeeds well in the open air in a sheltered situation, thriving well in the common garden soil, or, if grown in pots, a mixture of sandy loam and peat will suit it very well. Young cuttings, planted under hand-glasses, any time from the latter end of July, to the beginning of September, will root freely ; they may also be raised from seeds, which ripen in abundance.

Our drawing was made from a plant at the Nursery of Mr. Colvill, last Summer.





CISTUS obtusifolius.

Blunt-leaved Cretan Rock-Rose.

Sect. II. LEDONIA. *Supra fol. 8.*

§ 1. *Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.*

* *Pedunculis basi nudis; sæpè infrà medium folia opposita gerentibus.*

C. obtusifolius, foliis subsessilibus basi attenuatis ovato-oblongis obtusis rugosis stellato-pubescentibus margine subdenticulatis, pedunculis terminalibus cymoso-multifloris, sepalis exterioribus lato-cordatis acutis, petalis obcordatis imbricatis.

Cistus obtusifolius. *Swt. hort. brit. add. p. 468. n. 30. Colv. catal. edit. 3. p. 34. col. 3.*

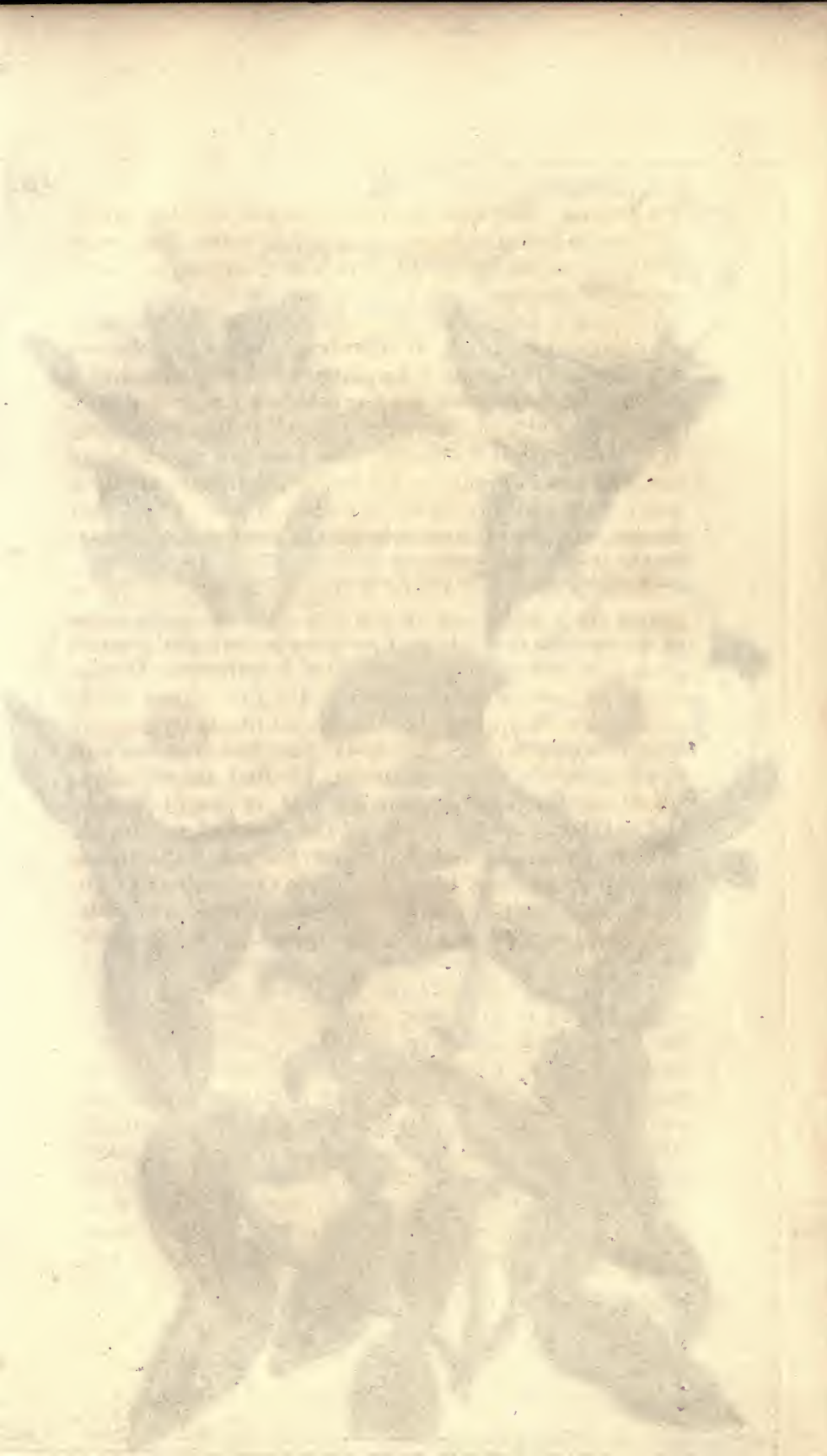
Stem shrubby, dwarf, very much branched, spreading in all directions: *branches* spreading, ascending, thickly clothed with a starry pubescence, or fascicles of stellate hairs. *Leaves* opposite, sessile, or nearly so, ovately oblong, obtuse, or with rounded points, attenuated at the base into a sort of short footstalk, slightly 3-nerved, rugose, reticulately veined, very rough and rigid, clothed on both sides with a starry pubescence, or clusters of short hairs, of a dark green on the upper side, and lighter underneath, margins slightly denticulate, and fringed with tufts of short hairs: upper leaves quite sessile, and embracing the stem. *Flowers* terminal in a many-flowered cyme. *Pedicels* rather short and stout, cylindrical, clothed with a white canescence, and longer hairs intermixed. *Calyx* of 5 sepals, the outer ones broadly cordate, acute, hairy on both sides, the margins slightly reflexed: inner ones ovate, taper-pointed or mucronate, with scariose membranaceous margins. *Petals* 5, obcordate, a little crumpled, white, with a yellow spot at the base, imbricate at the base, the points spreading. *Stamens* about 100, spreading, overtopping

the stigma : *filaments* unequal in length, slender, bright yellow. *Germen* clothed with silky hairs. *Style* very short, erect, hid by the large, capitate, slightly 5-lobed, papillose *Stigma*.

We have seen some fine specimens of this plant in the Herbarium of A. B. Lambert, Esq. who received them from Crete under the name of *C. salvifolius*, but it is very different from that species, or any other with which we are acquainted ; it forms a pretty little compact bush, which is covered with flowers a good part of the Summer ; the plants that we have seen have not been more than a foot to eighteen inches in height, and very bushy, and it appears to be one of the dwarfest growing species of the genus.

Being a native of Crete, it requires a little shelter in severe frost, either to be covered with mats, or some other covering, if planted in the open ground ; but if grown in pots, it may be protected in a frame or Greenhouse in frosty weather, and can then be turned out in the borders in Spring. It thrives well in any light sandy soil, or a mixture of light sandy loam and peat will suit it very well. Young cuttings, planted under hand-glasses in August or September, will strike root readily.

Our drawing was made at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham ; and it was most probably first introduced from Greece by Dr. Sibthorp, and has been in our collections ever since, without being noticed as a distinct species.





CISTUS hirsutus.

Hairy Rock-Rose.

Sect. II. LEDONIA. *Supra*, fol. 8.

§. 1. Pedunculis unifloris, aut multifloris cymosis: sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-ocularibus.

* Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.

C. hirsutus, foliis sessilibus oblongis obtusis hirsutis basi trinerviis, pedunculis brevibus unifloris aut cymoso-multifloris, capsulis parvis calyce maximo hirsuto et pyramidalis tectis, petalis rotundato-obcordatis imbricatis.

Cistus hirsutus. DC. *prodr.* 1. p. 265. *Lam. dict.* 2. p. 17. *Willden. enum.* 2. p. 568. *Link enum.* 2. p. 74. *Swt. hort. brit.* p. 34. n. 19. *Spreng. syst.* 2. p. 586.—*Clus. hist. Ledon.* 4.

Stem shrubby, very much branched: *branches* spreading, thickly clothed with unequal spreading hairs. *Leaves* opposite, sessile, oblong, obtuse, more or less undulate, 3-nerved at the base, rugose, strongly nerved underneath, the nerves much branched, hairy on both sides, the margins fringed: upper ones much broader than the lower ones, particularly towards their base, and more hairy, also more strongly 3-nerved. *Flowers* terminal, generally cymose, seldom solitary. *Pedicles* short, villosely hairy, slightly viscous, cylindrical. *Calyx* large, broad at the base, with a taper point, or pyramidal; *sepals* 5, villosely hairy, the hairs white and spreading: outer ones very broadly cordate, acute, leafy, their margins recurved or revolute: inner ones smaller, ovate, with taper points, their margins membranaceous. *Petals* 5, obovate or obcordate, imbricate, white, yellow at the base. *Stamens* about 100, unequal in length, spreading, far overtopping the stigma: *filaments* smooth, pale yellow: *pollen* bright yellow. *Germs* rough, pubescent. *Style* very short, erect. *Stigma* large, capitate.

This pretty plant is a native of Spain, and some other parts of the South of Europe, and is readily distinguished from all others by its very large pyramidal calyx and small capsules; it is often confused with *C. laxus* in the nurseries; but a comparison of our figures will readily distinguish them. The present plant is hardy enough to bear our Winters in the open borders without protection, except very severe ones, when a mat placed round it will preserve it well; but this is very seldom needed: when grown in the ground it is much more robust than the plant from which our drawing was made, which was grown in a pot; it produces a great profusion of flowers, which continue to expand in succession for a considerable time.

Our drawing was taken at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, last Summer, where we have also obtained drawings of many very rare, and some quite new species: the present plant thrives well in the common garden soil; or if grown in pots, it succeeds best in a mixture of sandy loam and peat. Young cuttings, planted under hand-glasses in August or September, or any time between that and the middle of February, will strike root freely; when they are rooted, they must be managed as mentioned under *C. purpureus*; young plants may also be raised from seeds, which ripen plentifully.





CISTUS platysepalus.

Broad sepaled Rock-Rose.

Sect. II. LEDONIA. *Supra fol. 1.*

§. 1. *Pedunculis unifloris, aut multifloris cymosis, sepalis 5, externis sæpiùs cordatis acuminatis; capsulis 5-locularibus.*

* *Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.*

C. platysepalus, foliis oblongo-lanceolatis sessilibus trinerviis rugosis utrinque villosopilosis, pedunculis cymosis calycibusque villosis, sepalis acuminatis exterioribus lato-cordatis, petalis obcordatis distinctis.

Cistus platysepalus. *Swt. hort. brit add. p. 468. n. 31.*

Stem shrubby, very much branched: *branches* spreading in all directions, erect or ascending, thickly clothed with long spreading villous white hairs. *Leaves* lanceolate, or oblongly-lanceolate, sessile, 3-nerved from the base, rugose, reticulately veined underneath, clothed on both sides with long villous hairs, the margins fringed: lower ones bluntish and narrowest; upper ones broad at the base, ovately lanceolate, many nerved and acute. *Flowers* terminal, in a branching cyme. *Peduncles* thickly clothed with villous spreading hairs. *Bractes* leaf-like, deciduous, ovate or ovately lanceolate, acute. *Pedicles* short, scarcely as long as the calyx, villous. *Calyx* of 5 sepals, the outer ones broadly cordate, taper-pointed, villously hairy on both sides, and fringed, the margins bent back a little: inner ones narrower, oblong or ovate, taper-pointed, concave, membranaceous, villous at the back, and smooth inside. *Petals* 5, distinctly spreading, not imbricate, obcordate, more or less crumpled, narrow at the base, white with a small yellow spot at the base. *Stamens* numerous, about 80, very unequal in length, overtopping the stigma: *filaments* slender, smooth and

yellow: *pollen* yellow. *Germen* hairy. *Style* short, erect. *Stigma* large, capitate, papillose, covering the short style, like an umbrella.

The present plant is generally confused with *C. monspeliensis* in our gardens, though no two plants need be more distinct, and it is much nearer related to *C. hirsutus*. It is a native of Crete, as we have ascertained by fine specimens in Mr. Lambert's Herbarium received from that country, and also marked *C. monspeliensis*; but a comparison with our figure of that species, or the figure in the Flora Græca, will easily decide the difference; we do not know when the present plant was introduced, but it was most probably brought by Dr. Sibthorp on his return from Greece.

We have not yet been fortunate enough to find *C. creticus* in any collection that we have visited, and fear that it is quite lost to the country; but it may probably still exist in some collection; should any of our Subscribers or their friends possess the plant, we should feel much obliged for specimens of it when in flower, the plant now known in Nurseries by that name being *C. purpureus*.

As the present plant is a native of Crete, it requires a little protection in severe frosty weather, either the covering of a mat, or to be protected in a frame, thriving well in a light sandy soil, and may be increased by seeds, or young cuttings planted under hand-glasses in August or September, will soon strike root.

Our drawing was made at the Nursery of Messrs. Whitley, Brames, and Milne, near Parsons Green, Fulham.





CISTUS psilosepalus.

Smooth Sepaled Rock-Rose.

Sect. II. LEDONIA. *Supra, fol. 1.*

§ 1. Pedunculis unifloris, aut multifloris cymosis, sepalis 5, exterioris sæpius cordatis acuminatis; capsulis 5-locularibus.

* Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.

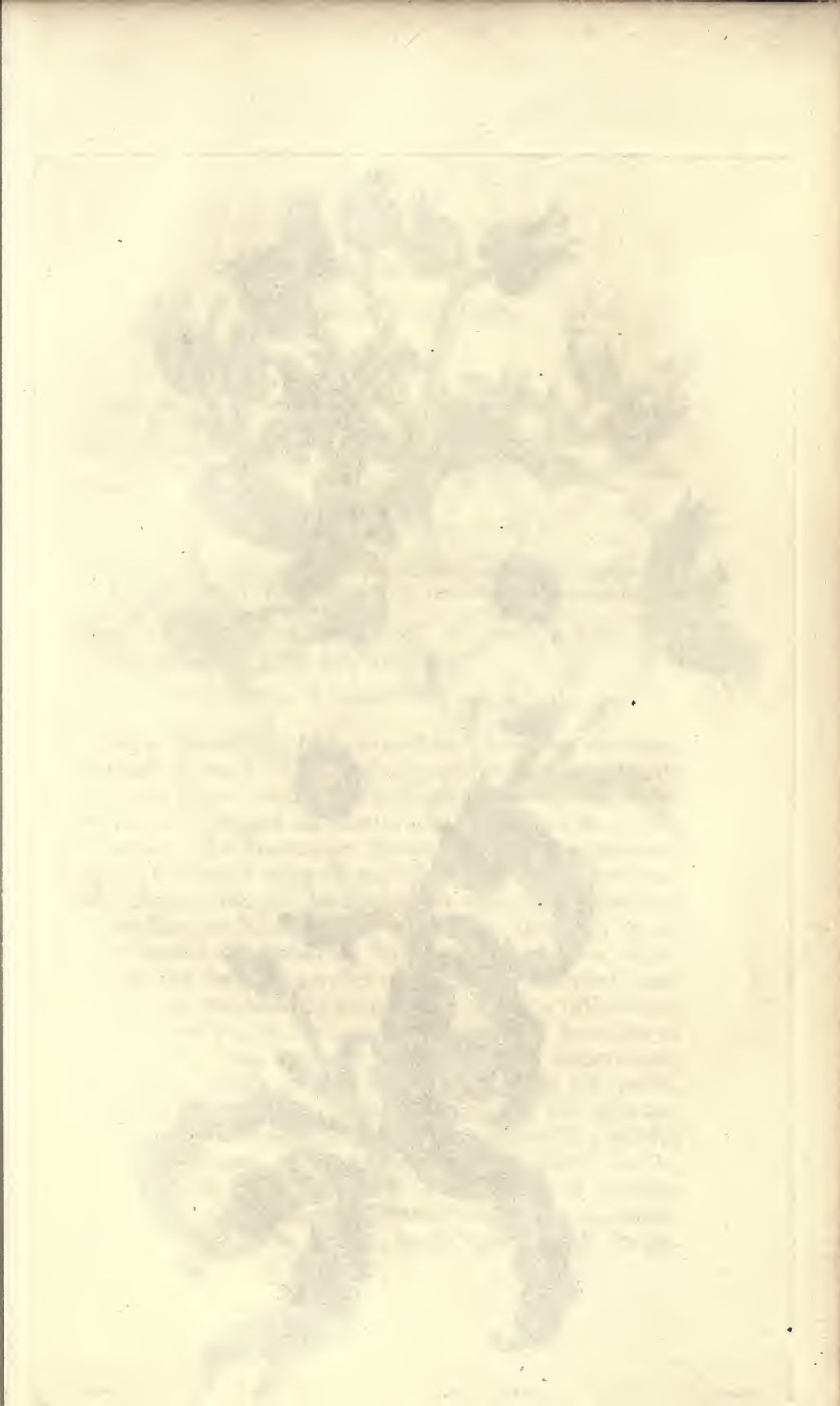
C. psilosepalus, foliis breviter petiolatis oblongo-lanceolatis acutis margine undulatis subdenticulatis ciliatis trinerviis subhirsutis, floribus subcymosis, pedunculis tomentoso-hirsutis, sepalis longe acuminatis glabris nitidis margine ciliatis, petalis latis cuneatis imbricatis.

Cistus psilosepalus. *Swt. hort. brit. addenda. p. 468.*

Stem shrubby, much branched; *branches* spreading, roughish, of rather a rusty appearance, thickly clothed with tufts of longish rigid hairs. *Leaves* on the stem with short footstalks, oblongly lanceolate, acute, three-nerved underneath, reticulately veined, of rather a glossy green on the upper side and paler underneath, hairy on both sides, the hairs underneath in little tufts; margin much undulate, rough or a little denticulate, and fringed with tufts of short hairs, and some longer ones intermixed: *the leaves* on the flower-stems sessile, connected at the base, more prominently three-nerved, and the points less sharp. *Flower-stems* axillary and terminal, also clothed with tufts of short hairs, and some long ones intermixed. *Peduncles* clothed with tufts of short woolly hairs, and some longer ones intermixed. *Calyx* of 5 sepals, the 3 outer ones broadly cordate, with long taper points, striated with numerous faint lines, which are branched a little, smooth and glossy, the margins fringed; inner ones ovate, membranaceous, with long subulate points. *Petals* 5,

broadly wedge shaped, very much imbricate, of a thin texture and much crumpled, of a pure white with a faint yellow mark at the base of each. *Stamens* numerous, about 150, spreading: *filaments* smooth, pale yellow, of various lengths; *pollen* yellow. *Germen* tomentose. *Style* very short, quite hid by the large capitate, slightly 5-lobed, papillose *Stigma*.

Our drawing of this plant was taken from one growing in the open border, at the Nursery of Mr. Lee, at Hammersmith, in July last; it appears to us to be quite new and nondescript, differing from all others with which we are acquainted by its smooth glossy sepals, and also in the shape of its leaves, approaching the nearest to *C. longifolius*, but still very different from that species; the plants were very bushy, and the shoots were terminated by large cymes of white flowers, which open in succession, and make a fine contrast with the dark green leaves with which the plants are clothed. It succeeds well in the common garden soil, in rather a dry situation, and would thrive well on rock-work; or if grown in pots, a mixture of sandy loam and peat would suit it very well. Cuttings planted under hand-glasses in Autumn, strike root freely.





CISTUS florentinus.

Florentine Rock-Rose.

Sect. II. LEDONIA. *Supra fol. 1.*

§. 1. Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-locularibus.

* Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.

C. florentinus, foliis lanceolatis rugosis reticulato-venosis subsessilibus, pedunculis villosis subtrifloris, sepalis longe acuminatis pilosis, petalis imbricatis.

Cistus florentinus. *Lam. dict. 2. p. 17. DC. prodr. 1. p. 265. Swt. hort. brit. p. 34. Spreng. syst. 2. p. 585.*

Stem shrubby, much branched: *branches* crowded, spreading, erect, or ascending, more or less tinged with purple; when young clothed with bunches of hairs, which are unequal in length, and are seated on a little tubercle; older branches glossy but rough, occasioned by the little tubercles on which the hairs had been seated. *Leaves* linearly lanceolate or sometimes oblongly lanceolate, undulate, acute, tapering to the base, upper ones sessile and broad at the base; lower ones tapering to the base into a sort of footstalk, 1-nerved, pinnately and reticulately veined, the points a little recurved; when young clothed with numerous bunches of short hairs, and a sort of thin tomentum underneath, the hairs mostly curved upwards towards the point, stiff and rigid, which causes a roughness; old ones becoming smooth and glossy, and more or less tinged with purple. *Bractes* or leaves on the flower-stem, sessile, three-nerved from the base. *Peduncles* and *pedicles* clothed with spreading hairs and shorter down intermixed, which gives them a hoary appearance, the pe-

duncles 2 or 3-flowered. *Flowers* white. *Calyx* of 5 sepals, which are villosely hairy, and taper to a long slender point, the outer ones cordate at the base, and the margins slightly reflexed, more or less tinged with purple: inner ones narrower. *Petals* 5, white, tinged with red at the points, and a yellow spot at the base, broadly obovate, imbricate their whole length, spreading flat, or sometimes slightly cupped. *Stamens* numerous, spreading, unequal in length: *filaments* short, smooth, yellow: *pollen* golden yellow. *Germen* tomentose. *Stigma* capitate, sessile, very large, tuberculate.

Our drawing of this rare and very distinct species was made at the Nursery of Messrs. Whitley, Brames, and Milne, in July last, the only collection in which we have ever seen it; but we hope it will now soon become more plentiful, as it forms a pretty upright bush, and makes a neat appearance when covered with bloom; we suspect it will also bear our Winters without protection, particularly if placed in a sheltered situation, thriving well in any light sandy soil; and young cuttings, planted under hand-glasses, in August or September, will strike root freely.





CISTUS monspeliensis.

Montpelier Rock-Rose.

Sect. II. LEDONIA. *Supra, fol. 1.*

§. 1. *Pedunculis unifloris, aut multifloris cymosis; sepalis 5, externis sæpius cordatis acuminatis; capsulis 5-ocularibus.*

* *Pedunculis basi nudis, sæpè infrà medium folia opposita gerentibus.*

C. monspeliensis, caule erecto ramoso, foliis angusto-lanceolatis rugosis trinerviis viscosis subtus reticulatis sessilibus, pedunculis terminalibus villosis subcymosis, sepalis parvis villos-viscosis, petalis obovato-cuneatis basi imbricatis.

Cistus monspeliensis. *Linn. spec. 737. DC. prodr. 1. p. 265.*

Willden. sp. pl. 2. p. 1184. Pers. syn. 2. p. 75. Hort. Kew. ed. 2. v. 3. p. 305. Flor. græc. t. 493.

Stem shrubby, erect, straight, clothed with a brown glossy bark, branching: *branches* erect, hairy, and slightly viscous. *Leaves* opposite, sessile, narrowly lanceolate, acute, or scarcely obtuse, very much rugose or wrinkled, three-nerved from the base, underneath reticulately wrinkled, viscous, covered on both sides with tufts of short brown hairs and long simple ones intermixed, of a dark green on the upper side, and of a brown rusty colour underneath; those at the base of the peduncles broader at the base, more strongly nerved and sharper pointed. *Peduncles* terminal, on the small shoots 3, 4, and 5-flowered, on the terminal ones cymose, and from 10 to 20-flowered, thickly clothed with spreading unequal clammy hairs, as are the pedicles and sepals. *Pedicles* short, scarcely as long as the sepals. *Calyx* of 5 sepals, the outer ones rather largest, ovate, acute, clammy and thickly clothed with long spreading hairs; inner ones narrower, concave, sharper pointed, also very hairy. *Petals* 5, obcordate, or

broadly cuneate, imbricate a great way up, a little crumpled, scarcely twice the length of the calyx, white with a yellow spot at the base. *Stamens* very short, but overtopping the stigma, about 50: *filaments* unequal in length, smooth, yellow. *Germen* pubescent. *Style* short, straight. *Stigma* large, capitate, granular.

The present species is not a common inhabitant of our collections, and another species, a native of Crete, is often confused with and sold for it at the Nurseries, although no two plants of a section can well be more dissimilar; we have also seen them confused in the Herbariums; and in a collection of Cretan specimens lately received by Mr. Lambert were fine specimens of it, marked *C. monspeliensis*, though it is much nearer related to *C. hirsutus*. As the present plant is so scarce in collections, we are inclined to believe that it is more tender than some other species, particularly as it is a handsome growing plant, and an abundant bloomer; it should therefore be planted in a warm border, or where it can receive some protection in severe weather. Plants of it may be grown in pots, and can then be protected in frames in Winter; it succeeds well in any rich light soil, or a mixture of sandy loam and peat will suit it very well. Cuttings planted under hand-glasses in Autumn will strike root readily, but the glasses must not be kept too close on them for any length of time, or they will be very liable to damp and turn mouldy. Our drawing was taken from a plant at the Nursery of Mr. Colvill, in August last.





CISTUS Clusii.

*Clusius's Rock-Rose.*Sect. II. LEDONIA. *Supra, fol. 1.*

§ 2. *Pedunculis bracteatis, bracteis caducis decussatis, inferioribus minoribus unifloris, axillaribus solitariis vel terminalibus umbellatis: calycibus 3-5 sepalis; capsulis 5-10 locularibus.*

** *Stigmate capitato parvo, stylo cylindrico staminibus subæquali.*

C. Clusii, caule fruticoso suberecto ramoso, foliis subtrinerviis linearibus margine revolutis subtus subcanescentibus, floribus subcapitatis, calyce 3-5-sepalo piloso; sepalis ovatis acutis exterioribus minoribus, capsulis 5-locularibus.

Cistus Clusii. *Dunal in DC. prodr. 1. p. 226. Swt. hort. brit. p. 34. n. 28.*

Cistus Libanotis β. *Lam. dict. 2. p. 18. Desf. fl. atl. 1. p. 412. excl. synon.*

Ledon VII. Clus. hist. 1. p. 80. ic.

Stem shrubby, erect or spreading, much branched: *branches* spreading, hispidly hairy, when old clothed with a dark brown scaly bark; young ones thickly clothed with unequal, spreading, soft white hairs. *Leaves* opposite, sessile, connate, clasping the stem, crossing each other, linear, bluntish or rarely acute, three-nerved from the base, more or less rugose, reticulately veined, margins a little rolled back, entire, young ones hairy on both sides, old ones of a dark green, and rather glossy on the upper side, slightly canescent and tomentose underneath. *Panicles* bracteate, at first capitate, afterwards lengthening out, thickly clothed with spreading villous hairs, as are the peduncles, bractes, and calyx. *Bractes* ovate, acute, lower ones leaf-like, crossing each other, like the leaves, generally longer than the peduncles. *Peduncles* generally 3 or 4-flowered, with a small ovate, fringed, deciduous bracte at the base. *Pedicles* slender, villous.

Calyx of 3, 4, or 5 sepals, when more than 3, the outer ones are smallest: *sepals* ovate, acute, villous, fringed, margins more or less membranaceous. *Petals* 5, white, with a yellow spot at the base, imbricate at the base and distinct at the points, obovate or obcordate, very slightly crenulate, about half an inch long, and nearly the same in breadth. *Stamens* from 30 to 40, spreading, the inner ones longest, about the length of the style: *filaments* yellow: *anthers* orange-coloured. *Germen* conical, densely tomentose. *Style* smooth, narrow at the base and thickened upwards. *Stigma* capitate, slightly 5-lobed, granular.

The present species is described as 3-sepalous in M. Decandolle's *Prodromus*, but the calyx varies with from 3 to 5 sepals, and this is also represented in Clusius's figure. It forms a handsome snug compact bush, and is pretty hardy, as it will stand the Winter well in a sheltered situation, thriving best in a dry sandy soil, and producing abundance of its neat little white flowers; it is a very different species from any other, approaching the nearest to *C. monspeliensis*, and is at present very little known; it is also a scarce plant; but we hope it will now come into notice, as it is deserving a place in every collection. Cuttings of it root freely, if planted under hand-glasses. The beginning of the present month, and from that time to the latter end, is as good a time as any for planting cuttings of all the different sorts; they will then strike root, and may be potted off before the Winter sets in.

Our drawing was made from a plant communicated by Messrs. Whitley, Brames, and Milne, last Summer.





CISTUS ladaniferus a. albiflorus.

White-flowered flat-leaved Gum Cistus.

Sect. II. LEDONIA. *Supra fol. 1.*

§ 2. *Pedunculis bracteatis, bracteis caducis decussatis, inferioribus minoribus unifloris, axillaribus solitariis vel terminalibus umbellatis; calycibus 3-sepalis; capsulis 5-10-ocularibus.*

* *Stigmate magno sessili.*

C. ladaniferus, foliis planis subsessilibus basi connatis lineari-lanceolatis trinerviis supra glabris nitidis subtus tomentosis reticulato-venosis, capsulis 10-ocularibus. *Supra fol. 1.*

Cistus ladaniferus. *Linn. spec. 737. Pers. syn. 2. p. 75. Link enum. 2. p. 74. DC. prodr. 1. p. 266. Spreng. syst. 2. p. 585.*

a. albiflorus, petalis omnino albis. *Ledon 1. Clus. hist. 1. p. 78. ic. Supra.*

β. maculatus, petalis albis, basi maculâ atrosanguineâ notatis. *Supra fol. 1. t. 1.*

Stem shrubby, erect, branching: *branches* slender, thickly clothed with a glossy viscous substance. *Leaves* nearly sessile, slightly connected at the base, flat, sometimes reflexed, linearly lanceolate, acute, 3-nerved from the base; upper side smooth and shining, viscous; clothed underneath with a white dense tomentum, reticulately veined. *Flowers* terminating the branches, solitary, large, white. *Bractes* 6, opposite, crossing each other: the four lower ones leaf-like, dilated and concave at the base, fringed; 2 upper ones membranaceous, obovate, taper-pointed, concave, ciliate. *Calyx* of 3 sepals, that are cordately ovate, acute, concave, striated, fringed on one side; the other side smooth. *Petals* 5, broadly obovate, margins uneven, white, tinged with yellow a little above the base. *Stamens* numerous; *filaments* smooth, attached to the base of the anthers,

and overtopping the stigma: *pollen* yellow. *Germen* tomentose. *Stigma* large, sessile, capitate.

Our drawing of the present variety was made from a plant at the Nursery of Mr. Colvill, in the King's-road ; it requires precisely the same sort of treatment as the spotted flowered variety figured at folio 1. requiring a little protection in Winter, as it is much more tender than *C. cyprius*. It thrives best in a light sandy soil, and may be propagated by layers, or from seeds, that ripen in abundance.





M. Hart. del.

Pubby J. Ridgway 169. Piccadilly July. 1. 1825.

J. Wallis. sc.

CISTUS ladaniferus β . *maculatus*.

Spotted-flowered flat-leaved Gum Cistus.

CISTUS. *Calyx* 5-sepalus, sepalis duplici serie dispositis, 2 externis inæqualibus, interdum nullis. *Petala* 5, æqualia, subcuneata, caduca. *Stamina* numerosa, sæpè è disco glanduloso exserta. *Stylus* filiformis. *Stigma* capitatum. *Capsula* calyce oblecta, 10-5-locularis, valvis 10-5, medio septiferis. *Semina* ovato-angulata. *Embryo* filiformis spiralis.—*Folia opposita exstipulata integra vel denticulata*. *Pedunculi axillares, uni aut multiflori*. *Semina ex solo C. monspeliensi descripta*. DC. prodr. 1. p. 263.

Sect. II. LEDONIA, *Sepala* 5, 2 externa majora valde acuminata vel nulla: *petala* alba aut albida; *stamina* numerosa pistillo longiora; *stigma* subsessile magnum capitatum; *capsula* 5-10-locularis.—*Frutices aut suffrutices: folia sæpe glutinosa*.

§ 2. *Pedunculis bracteatis, bracteis caducis decussatis, inferioribus minoribus unifloris, axillaribus solitariis vel terminalibus umbellatis; calycibus 3-sepalis; capsulis 5-10-locularibus*. DC. p. 266.

* *Stigmate magno sessili*.

C. ladaniferus, foliis planis subsessilibus basi connatis lineari-lanceolatis trinerviis supra glabris nitidis subtus tomentosis reticulato-venosis, capsulis 10-locularibus.

Cistus ladaniferus. Link enum. 2. p. 74. DC. prodr. 1. p. 266.

Cistus ladaniferus. β . *planifolius*. Hort. Kew. ed. 2. v. 3. p. 305.

α . *albiflorus*, petalis omnino albis. Ledon. 1. Clus. hist. 1. p. 78. ic.

β . *maculatus*, petalis albis, basi maculâ atrosanguineâ notatis. Supra.

Stem shrubby, erect, branching: *branches* slender, thickly clothed with a shining glutinous substance.

Leaves slightly connected at the base, nearly sessile, flat, linearly-lanceolate, acute, 3-nerved from the base; upper side smooth and glossy, viscous; underneath clothed with a dense white tomentum, reticulately veined. *Flowers* terminal, solitary. *Bractes* 6, opposite, crossing each other: the 4 lower ones leaf-like, dilated and concave at the base, fringed; 2 upper ones membranaceous, obovate, taper-pointed, concave, ciliate.

Calyx of 3 sepals, which are cordately ovate, acute, concave, striated, fringed on one side, the other

side smooth. *Petals* 5, broadly cuneate; margins slightly notched, of a pure white tinged with yellow at the base, above which is a large dark crimson mark, slightly branched. *Stamens* about 100; filaments smooth, attached to the base of the anthers, overtopping the stigma; *pollen* yellow. *Germen* tomentose, cream-coloured. *Stigma* sessile, capitate.

This beautiful species must not be confused with the plant generally known by the name of Gum Cistus in the gardens, and also confounded with this in Curtis's Botanical Magazine, t. 112; the plant there figured is *C. Cyprius* of M. Decandolle's Prodromus, and differs from the present in bearing 3 or more flowers on each peduncle; the leaves are also petiolate, and the capsules only 5-locular; differences which readily distinguish it from our plant, which we believe is the largest flowered species of the genus. It is not so hardy as *C. Cyprius*, and will not survive our winters in the open air, except very mild ones, but will thrive well against a wall, so as to be covered with mats in severe weather, and a little dry litter put on the ground to keep the frost from the roots; it is also a good plan to keep some plants in pots, to be preserved through the winter in frames, and to be turned out of them in the open ground in spring; they will then thrive well, and flower in fine perfection. It succeeds well in a rich light soil, and prefers a dryish situation, as its roots are apt to rot if it happens to get too much moisture. It may be increased by cuttings or layers; the former must be taken off as soon as the young shoot is ripened, and they must be planted thinly under hand-glasses, for if planted too thick, they will be liable to damp.

Our drawing was taken from a plant at the Nursery of Mr. Colvill, King's Road, Chelsea. We also received specimens of it from Malcolm and Gray's Nursery, Kensington.





CISTUS cyprius.

*Common Gum Cistus, or Rock-Rose.*Sect. II. LEDONIA. *Supra fol. 1.*

§ 2. *Pedunculis bracteatis, bracteis caducis decussatis, inferioribus minoribus unifloris, axillaribus solitariis vel terminalibus umbellatis; calycibus 3-sepalis; capsulis 5-10-locularibus.*

* *Stigmate magno sessili.*

C. cyprius, foliis petiolatis oblongo-lanceolatis supra glabris subtus tomentoso-incanis, pedunculis subumbellatis plurifloris, calycibus 3-raro 4-5-sepalis, petalis guttatis, capsulis 5-locularibus.

Cistus cyprius. *Lam. dict. 2. p. 16. DC. prodr. 1. p. 266. Swt. hort. brit. p. 34. n. 25.*

Cistus ladaniferus. *Botan. magaz. 112. nec aliorum.*

A large bushy shrub. *Stem* erect, much branched: *branches* spreading, glossy, viscous. *Leaves* opposite, petiolate, connected at the base, and sheathing the stem, oblongly lanceolate, acute, more or less undulate, upper sides smooth and glossy, viscous; underneath 3-nerved from the base, reticulately veined, and clothed with a dense white tomentum. *Flowers* terminal, in a many flowered umbel. *Peduncles* bracteate. *Bractes* decussate, deciduous; the bottom ones smallest, and soon dropping, lanceolate, taper-pointed and keeled: upper ones ovate, concave, taper-pointed, keeled, the margins densely fringed with white hairs. *Pedicles* fasciculately hairy, viscous. *Calyx* of 3 sepals, or very rarely of 4 or 5 sepals: *sepals* broadly ovate, acute, concave, the margins scariose or membranaceous, inside punctate, and striped with numerous lines, outside scaly, or clothed with fascicles of very short hairs, having the appearance of scales. *Petals* 5, broadly cuneate or obcordate, more or less crumpled, imbricate, margins uneven or crenulate, white, with a yellow spot at the base, and a large

bright purple spot above it, which is more or less branched. *Stamens* short, about 150, unequal in length, the inner ones longest: *filaments* slender, pale yellow. *Germen* tomentose. *Style* hid by the stigma. *Stigma* very large, capitate, papillose.

The present plant being one of the handsomest, and also being pretty hardy, is more generally cultivated than any other species; and in all the collections where we have seen it, it has been considered as the *C. ladaniferus*, and that species in the Nurseries is sold under the name of *C. salicifolius*. In Curtis's Botanical Magazine, the present plant is also named *C. ladaniferus*, and the figure is referred to as such in the last edition of the Hortus Kewensis, though no two species can be more distinct, the present bearing several flowers in a cyme, the buds not half the size of *C. ladaniferus*, the capsule only 5-celled, and of a very different shape, and the leaves petioled: *C. ladaniferus* always produces its flowers solitary, which are also larger, its capsule is from 7 to 10-celled, and its leaves are flat and sessile; it is much more distinct from the present plant, than the present is from *C. laurifolius*, of which it is considered as a variety by Persoon: the present plant thrives well in the open border, and ripens plenty of seeds; but it is best to have some young plants also in pots, to be preserved in frames in severe Winters, which will occasionally destroy the old ones. Young cuttings, planted under hand-glasses in Autumn, will strike root; but the best way is to raise them from layers or seed.

Drawn at Mr. Colvill's Nursery, in July.





CISTUS laurifolius.

*Laurel-leaved Rock-Rose.*Sect. II. LEDONIA. *Supra fol. 1.*

§. 2. *Pedunculis bracteatis, bracteis caducis decussatis, inferioribus minoribus unifloris, axillaribus solitariis vel terminalibus umbellatis; calycibus 3-sepalis; capsulis 5-10-ocularibus.*

* *Stigmate magno sessili.*

C. laurifolius, foliis petiolatis ovato-lanceolatis trinerviis supra glabris subtus tomentosis, petiolis basi dilatatis connatis, capsulis 5-ocularibus. *DC. prodr. 1. p. 266.*

Cistus laurifolius. *Linn. spec. 736. Willden. sp. pl. 2. p. 1182. Lam. enc. 2. p. 16. Pers. syn. 2. p. 74. Hort. Kew. ed. 2. p. 304.—Clus. hist. 1. p. 78. f. 1.*

Stem shrubby, erect, much branched: *branches* spreading, densely clothed with fascicles of short hairs, which press inward to the stem, upper part glutinous. *Leaves* opposite, petioled, ovate or ovately lanceolate, acute, very much undulate at the margins, three-nerved from the base, upper side smooth, of a dark green, and viscid; underneath clothed with a short dense white tomentum, which wears off by age, and the leaf is then very much reticulated underneath. *Petioles* deeply channelled on the upper side, and convex or keeled on the lower, widened at the base, where they are connected, and clasp the stem, thickly clothed with tufts of short hairs. *Peduncles* long, cylindrical, clammy, many-flowered, either panicled, corymbose, whorled or umbellate. *Bractes* ovate, acuminate, convex, downy, more or less of a red colour, but deciduous, and falling off before the expansion of the flowers. *Pedicles* cylindrical, densely clothed with fascicles of unequal hairs, the points of which bend inwards. *Calyx* of 3 sepals, which are ovate, taper-pointed, convex, or concave

inwards, with one margin membranaceous, the other fringed, thickly clothed with longish spreading white hairs. *Petals* 5, more or less imbricate, cuneate, more or less crumpled, white with a light yellow spot at the base. *Stamens* about 180, the filaments unequal in length, smooth, light yellow: *pollen* golden yellow. *Germen* villous. *Style* short, pubescent. *Stigma* capitate, 5-lobed, papillose.

A hardy strong growing handsome Shrub, which makes a fine appearance with its large green Laurel-like leaves, and produces an abundance of flowers; those even in the bud state are very ornamental, when covered with their large light red bractes, having the appearance of Rose buds. It thrives well in the common garden soil, and needs no protection, being quite hardy, and may be raised in abundance by seeds, which ripen plentifully; it may also be raised from layers; or young cuttings, planted under hand-glasses in Autumn, will strike root.

Our drawing was made last Summer at the Nursery of Mr. Mackay, then of the King's Road, but now removed with his whole collection to the more healthy and pleasant situation at Clapton, where he cultivates, with great success, the choicest selection of New Holland plants ever introduced to this country.





HELIANTHEMUM umbellatum.

Umbel-flowered Sun-Rose.

Sect. I. HALIMIUM. *Supra*, fol. 4.

* *Stylo brevi recto*. DC. prodr. 1. p. 267.

H. umbellatum, caule fruticoso ramoso; ramis junioribus tomentoso-pilosis viscosis, foliis sessilibus lineari-oblongis margine revolutis subviscosis: suprâ nitidis atroviridibus; subtùs tomentosis, bracteis ovatis acutis carinatis, pedunculis unifloris racemoso-verticillatis terminalibus umbellatis, calycibus trisepalis villosis viscosis.

Helianthemum umbellatum. DC. prodr. 1. p. 267. *Mill. dict. n. 5.*
Pers. syn. 2. p. 76. Spreng. syst. veg. 2. p. 586. Swt. hort. sub. lond. p. 123. Hort. brit. p. 34. n. 2.

Cistus umbellatus. Willden. sp. pl. 2. p. 1190. *Hort. Kew. ed. 2. v. 3. p. 307.*

Stem shrubby, erect, or more or less spreading, from 9 to 18 inches in height, clothed with a hard brown glossy bark, much branched: *branches*, while young, viscous, clothed with short woolly hairs. *Leaves* opposite, crossing each other, sessile, linearly oblong, bluntish, with revolute margins, more or less ciliate, when young, pubescent and viscous: upper side of a dark glossy green; underneath reticulately veined, and clothed with a dense rusty white tomentum. *Flowers* white, numerous, terminating the branches in a whorled raceme, and ending in an umbel. *Bractes* ovate, acute, concave, keeled at the back, membranaceous, dropping off when the flowers expand. *Pedicles* in whorls round the stem, slender, one-flowered, viscus and pubescent. *Sepals* 3, cordately ovate, acute, concave, villous, about half the length of the petals. *Petals* 5, of a pure white, with yellow unguis, roundly obovate, or obcordate, imbricate at the base, at first cup shaped, afterwards flat, and at last reflexed. *Stamens* about 16, nearly erect, the outer ones scarcely

half as long as the inner ones, and more spreading: *filaments* slender, smooth: *pollen* orange-coloured. *Germen* densely tomentose. *Style* smooth, about the length of the stamens. *Stigma* capitate, slightly 3-lobed, tuberculate.

This handsome and very distinct species, is a native of France, Spain, and Portugal, and is said to have been cultivated in this country as far back as 1731; it is a pretty plant for ornamenting rock-work, but is liable to be injured in very severe winters, except covered with mats or a little dry litter in severe frost; if there happen to be a sufficiency of snow on the ground, that will answer the purpose; but it is best to have some plants of it in pots, that may be protected in a frame in severe weather; those can be turned out in the ground in Spring, where they will thrive and flower well.

The present plant is generally sold in the nurseries by the name of *Cistus Libanotis*, which is a very different species, and appears to be much more rare than this plant, as we have not been able to detect it this Summer in any collection that we have examined; this species varies considerably in habit and pubescence, according to the situation in which it is grown; if grown under glass, it is much more pubescent, and the leaves are strongly fringed, as in our figure; but when grown in the open air, the leaves are quite smooth and glossy, with scarcely a vestige of pubescence, except on the under side, where they are clothed with a dense tomentum; we, therefore, believe the two varieties of M. Decandolle to be occasioned only by difference of situation; we have accordingly united them.

Our drawing was taken from a plant lent us from the Nursery of Mr. Lee, at Hammersmith, in June last; it thrives well in small pots, in a mixture of sandy loam and peat, and continues to bloom in succession from June to August. Young cuttings, planted under hand-glasses, strike root readily; it may also be raised from seeds, which ripen plentifully.





HELIANTHEMUM ocymoides.

Basil-like Sun-Rose.

Sect. I. HALIMIUM. *Supra, fol. 4.*

* *Stylo brevi recto.*

H. ocymoides, caule suffruticoso ramoso, ramis erectis incanis, foliis caulinis obovatis vel ovato-oblongis trinerviis subsessilibus viridibus: ramulorum petiolatis dorso carinatis apice reflexis utrinque incanis, pedunculis longis ramoso-paniculatis, pedicellis oppositis alternisque subumbellatis, calycibus trisepalis glabris valde acuminatis, petalis obcordatis basi distinctis.

Helianthemum ocymoides. DC. *prodr.* 1. p. 267. *Pers. syn.* 2. p. 76.

Swt. hort. brit. p. 34. n. 3. *Spreng. syst. veg.* 2. p. 586.

Cistus ocymoides. *Lam. dict.* 2. p. 18. *Cistus sampsucifolius*.

Cavan. ic. 1. p. 65. t. 96. non *Milleri*. — *Clus. hist.* 1. p. 72. *ic.*

Stem suffruticose, erect, much branched: *branches* erect, densely clothed with a white tomentum, and a few long white hairs intermixed. *Leaves* opposite: on the lower part of the stem green, obovate, ovately oblong, or oblongly lanceolate, sessile or nearly so, attenuated at the base, slightly 3-nerved, acute or sometimes bluntish, rather concave, nearly straight, the upper side covered with long spreading hairs: upper leaves petiolate, shorter and broader, with recurved points, keeled at the back, the margins curved inwards; very white and hoary on both sides, by being densely clothed with a close white tomentum. *Petioles* short, also densely clothed with a close pressed white tomentum. *Flowers* on a long branched panicle. *Peduncles* of a brownish purple, glossy, more or less clothed with long spreading white hairs. *Bractes* sessile, opposite, ovately lanceolate, acute, keeled, points a little recurved, smooth and glossy. *Pedicles* 3 or more flowered, in a kind of umbel, opposite on the lower part of the panicle, on the upper part alternate. *Calyx* smooth

and glossy, with a long taper point, green, tinged with purple: *sepals* 3, oblongly lanceolate, concave, the margins scariose and membranaceous. *Petals* 5, obcordate, distinct to the base, a little cupped, margins slightly crenulate, of a golden yellow, with a large black spot a little above the base, edged with purple. *Stamens* between 40 and 50, overtopping the stigma: *filaments* very unequal in length, smooth and very slender, bright yellow: *anthers* dark purple: *pollen* bright yellow. *Germen* clothed with silky hairs. *Style* very short, erect. *Stigma* capitate, 3-lobed, papillose, flesh-coloured.

This very handsome species, of which there is a good figure in Cavanille's *Icones*, is very often confused in the collections with *H. algarvensis*, as is several other species that are belonging to the same section; we have had them all sent to us as *H. algarvensis*, though different in every respect from that species, except in colour. The present plant is a native of the South of Europe, so that it requires the protection of a frame in Winter, or to be planted against a south wall, and to be covered with mats in severe frosty weather; or if planted in rock-work, it should be placed on the south side, and should be covered with a mat or by some other means in sharp frosty weather, but in mild weather, the more it is exposed the better: it succeeds well in a light sandy soil, or if grown in pots, an equal mixture of sandy loam and peat will suit it very well. Cuttings taken off at a joint in the young wood, and planted under a hand-glass, the latter end of Summer, or in Autumn, will soon strike root, and will be nice bushy flowering plants by Spring. Our drawing was made from a plant at the Nursery of Mr. Colvill, in July, 1823; the plant from which it was taken was rather drawn up in a greenhouse; it generally grows more compact.





HELIANTHEMUM microphyllum.

Small-leaved Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmatè magno.*

H. microphyllum, caule suffruticoso ramosissimo : ramis nigro-cinerascentibus apice tomentoso-hirsutis, foliis subsessilibus sæpè obtusis carinatis basi attenuatis obscurè cinerascentibus tomentosis, floribus terminalibus paniculatis, paniculis elongatis aphyllis, pedunculis tomentoso-hirsutis, pedicellis 1-2-floris brevissimis, calycibus 3-sepalis hirsutissimis, petalis cuneatis distinctis.

Helianthemum rugosum. β microphyllum. DC. prodr. 1. p. 268.

Helianthemum alyssoides. β microphyllum. DC. flor. fr. suppl. p. 62.

Stem suffruticose, elongated, but scarcely strong enough to support its own weight without assistance, very much branched: *branches* weak, slender, ascending, thickly clothed with small shoots, which are opposite and cross each other, densely clothed with a close pressed dark canescent tomentum, the upper part irregularly, with longish spreading hairs. *Leaves* numerous, nearly sessile, crowded, small, oblongly ovate, nearly round, or sometimes lanceolate, bluntish or scarcely acute, very narrow towards the base, undulate, the sides curved inwards, sharply keeled underneath, very stiff and rigid, densely clothed with a close-pressed dark canescent tomentum, margins rough. *Panicle* terminal, leafless, very long and loose, thickly clothed with stiffish spreading purple hairs, that are unequal in length, lower branches of the panicle opposite, the upper ones alternate. *Pedicles* very short, tomentosely-hairy, one to three-flowered. *Calyx* of 3 sepals, that are ovately lanceolate, concave, very taper-pointed, densely clothed with woolly hairs, of unequal

lengths, tinged with purple. *Petals* 5, not at all imbricate, but distinctly spreading, wedge shaped, very narrow at the base, more or less crumpled or undulate, of a bright yellow, with a smallish dark purple spot on each, a little above the base. *Stamens* from 80 to 100; *filaments* smooth, unequal in length, of a pale yellow: *anthers* yellow, with a purple spot at the point: *pollen* granular, orange-coloured. *Style* hid by the large capitate granular *Stigma*.

Our drawing of this handsome species, was made from a fine plant, in the garden belonging to the Apothecaries' Company, at Chelsea, the only collection in which we have seen it, and where it was grown in a pot, and preserved through the Winter in the Greenhouse; it is one of the latest flowering species, and is nearly related to *H. alyssoides* and *H. rugosum*, but in our opinion is sufficiently distinct from both, being readily distinguished from all its congeners, except *H. ocymoides*, by its small leaves, and from that by their different form, and the habit of the plant: like the other plants of the section to which it belongs, it is rather tender, requiring a little protection in severe frosty weather, either to be planted near a wall or fence, and to be covered with a mat, or to be grown in pots, and to be protected under a frame, or in the Greenhouse; a mixture of light sandy loam and peat is the best soil for it; and young cuttings, planted under hand-glasses in Autumn, soon strike root.





HELIANTHEMUM algarvense.

Algarvian Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmate magno.*

H. algarvense, caule fruticoso ramoso: ramis flexuosis dense tomentosis, foliis sessilibus ovato-lanceolatis obtusis obsolete triner-
viis basi attenuatis: supra pilosis viridibus; subtus tomentosis
canescentibus, pedunculis subpaniculatis pilosis, calycibus 3-se-
palis acutis hirsutis.

Helianthemum algarvense. DC. *prodr.* 1. p. 286. n. 7. *Spreng. syst.*
veg. 2. p. 587. n. 9. *Swt. hort. sub. lond.* p. 123. *Hort. brit.* p. 34.
n. 7.

Cistus algarvensis. *Botan. magaz.* 627. *Hort. Kew. ed. 2. v. 3. p. 304.*

Stem shrubby, much branched, growing to the height of 2 or 3 feet if supported, erect or flexuose, seldom growing in the manner represented in the Botanical Magazine; *branches* more or less flexuose, densely clothed with a close pressed white tomentum, and a few spreading white hairs intermixed. *Leaves* opposite, sessile, very much attenuated towards the base, with blunt points, greenish and hairy on the upper side, and clothed with a thin tomentum underneath: *lower ones* short, roundly ovate, and green on both sides: *upper ones* ovately lanceolate or spathulate, slightly 3-nerved, clothed with a thin white tomentum on the lower side, and with little fascicles of hairs at the margins, which gives them an appearance of being crenulate: *young leaves* white on both sides. *Flowering branches* a little paniced, leafy at the base, clothed with spreading slender hairs, but not woolly as on the other branches. *Peduncles* and *pedicles* slender and hairy. *Calyx* of only 3 sepals, which are nearly equal, lanceolate, taper pointed, and clothed with long spreading loose white hairs. *Petals* 5, spreading, nearly or sometimes quite distinct

to the base, but when first opened, imbricate: obovate or broadly cuneate, with crenated points, of a bright yellow, with a large velvet spot at the base, which is also toothed in appearance; the spot at the base of each petal gives the appearance of a dark circle at the base of the flower. *Stamens* about 50, either more or less: *filaments* very unequal in length, of a dark purple, yellow at the base, smooth. *Germen* woolly. *Style* very short, hid by the large capitate, slightly lobed, pustulose *Stigma*.

The present plant being so much like some others, with which it is confused in many of the Nurseries, that we were afraid it had disappeared altogether, until we saw a plant of it last Spring in full bloom at Mr. Mackay's Nursery at Clapton, from which our drawing was taken; we have since seen it also at Mr. Lee's Nursery at Hammersmith. It is nearly related to *H. ocymoides*, but that is readily distinguished by its long taper-pointed glossy sepals, from *H. rugosum*; it is also distinguished by that having its petals imbricate, and its sepals clothed with stiff reddish brown bristles, not soft woolly hairs like the present.

This being a native of the South of Europe, it requires some protection in Winter; if planted in rock-work, or against a wall, it will require to be protected by a mat, or some covering in sharp frosty weather; or if grown in pots, it may be kept in frames or in the Greenhouse, where its lively blossoms in Spring make a pretty appearance; a light sandy soil suits it best, or a mixture of light turfy loam and peat will suit it very well. Cuttings, planted under hand-glasses, root freely, any time from July to September.





J. Hart, del.

Publ. by J. Ridgway. No. 9. Scandell. 1826.

HELANTHEMUM candidum.

*White-leaved Sun-Rose.*Sect. I. HALIMIUM. *Supra, fol. 4.*** *Stylo subnullo, stigmatē magno.*

H. candidum, caule fruticoso erecto; ramis leproso-candidis, foliis utrinque leproso-candidis lanceolato-obovatis basi attenuatis subpetiolatis planis supra pilosis subtus papilloso-scabris subtrinerviis; floralibus oppositis sessilibus utrinque viridibus, pedunculis longis subpaniculatis glabris vel parce pilosis, calycibus 3-5-sepalis acutis villosopilosis, petalis valde imbricatis.

Stem shrubby, erect, much branched, clothed with a brown warted bark: *branches* erect, or slightly spreading, densely clothed with a close pressed white tomentum, and a few long spreading hairs intermixed. *Leaves* opposite, lanceolate, or lanceolately obovate, bluntish, or scarcely acute, flat, or the margins of the round leaves folded inward, attenuated at the base into a sort of footstalk, clothed on both sides with a dense white tomentum, and long spreading white hairs on the upper side; underneath slightly 3-nerved, and very rough, occasioned by small tubercles, on which grow short tufts of hairs; those on the flower stems, opposite, green on both sides, more strongly 3-nerved, with a few long spreading hairs on the upper side, and tufts of short hairs seated on little rough tubercles underneath. *Flower-stems* long, paniculately branching, smooth and glossy, or a few hairs scattered here and there. *Bractes* elliptically lanceolate, acute, keeled at the back. *Pedicels* glossy, slightly warted. *Calyx* varying, with 3, 4, or 5 sepals; outer small sepals spreading, linear, scarcely acute, smooth and glossy; inner ones lanceolately ovate, concave, taper-pointed, with membranaceous margins, villosely hairy, more or less tinged with



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H. candidum, caule fruticoso erecto; ramis leproso-candidis, foliis utrinque leproso-candidis lanceolato-obovatis basi attenuatis subpetiolatis planis supra pilosis subtus papilloso-scabris subtrinnerviis; floralibus oppositis sessilibus utrinque viridibus, pedunculis longis subpaniculatis glabris vel parce pilosis, calycibus 3-5-sepalis acutis villosopilosis, petalis valde imbricatis.

Stem shrubby, erect, much branched, clothed with a brown warted bark: *branches* erect, or slightly spreading, densely clothed with a close pressed white tomentum, and a few long spreading hairs intermixed. *Leaves* opposite, lanceolate, or lanceolately obovate, bluntish, or scarcely acute, flat, or the margins of the round leaves folded inward, attenuated at the base into a sort of footstalk, clothed on both sides with a dense white tomentum, and long spreading white hairs on the upper side; underneath slightly 3-nerved, and very rough, occasioned by small tubercles, on which grow short tufts of hairs; those on the flower stems, opposite, green on both sides, more strongly 3-nerved, with a few long spreading hairs on the upper side, and tufts of short hairs seated on little rough tubercles underneath. *Flower-stems* long, paniculately branching, smooth and glossy, or a few hairs scattered here and there. *Bractes* elliptically lanceolate, acute, keeled at the back. *Pedicels* glossy, slightly warted. *Calyx* varying, with 3, 4, or 5 sepals; outer small sepals spreading, linear, scarcely acute, smooth and glossy; inner ones lanceolately ovate, concave, taper-pointed, with membranaceous margins, villosely hairy, more or less tinged with

purple, one or both of the small sepals are sometimes wanting. *Petals* 5, very much imbricate, of a bright yellow, with a dark velvety spot near the base, edged with purple. *Stamens* from 50 to 60, surrounding and overtopping the stigma: *filaments* unequal in length, smooth, yellow at the base, and dark purple upwards: *anthers* dark purple: *pollen* yellow. *Germen* densely clothed with close-pressed silky hairs. *Style* very short, erect, nearly hid by the large capitate, papillose *Stigma*.

Our drawing of this very fine plant was taken at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, last Summer, where it was cultivated as *H. algarvense*, which is a very different species, and is now become rather scarce in our collections; and we had almost been inclined to believe it was lost altogether, until we saw a fine plant of it in full bloom, at the Nursery of Mr. Mackay, at Clapton, from which we have obtained a figure; we have met with several other species of this section, which have all been confused in the collections where we have seen them, either with *H. algarvense*, or *H. halimifolium*. We last year received a very handsome and distinct species from Mr. Miller, of the Bristol Nursery, which is related to *H. algarvense*; it did not arrive in a state fit for drawing, but it is now very fine in bloom, and we believe will prove to be *H. rugosum* of Decandolle; its calyx consists of only 3 sepals, which are ovate, and thickly clothed with brown rigid hairs, which at once distinguishes it from all others; its flowers are not so large as the present plant, nor are the petals so much imbricate; the leaves are also of a thinner texture, very much undulate and twisted, and very rough or denticulate on the margins.

We have been informed by M. Lagasca, that the present subject is a native of Spain, and he is certain that it is a nondescript species; it will thrive well in a warm border by the side of a wall, or may be grown in a pot, and protected in a frame in Winter; it is readily increased by cuttings planted under a hand-glass, in Autumn.





HELIANTHEMUM rugosum.

Rugged-leaved Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmatē magno.*

H. rugosum, ramis subhirsutis tomentoso-leprosis scabris fusco-cineis, foliis sessilibus in petiolum attenuatis obovato-oblongis obtusiusculis subobliquis margine denticulato-scabris undulatis subtortis utrinque tomentosis rugosis basi trinerviis, pedunculis terminalibus axillaribusque subpaniculatis 1-2 floris folio brevioribus, calycibus trisepalis hispido-hirsutis, petalis crenulatis valde imbricatis.

Helianthemum rugosum. Dunal in DC. prodr. 1. p. 268. n. 5. Spreng. syst. 2. p. 586. Swt. hort. brit. p. 34. n. 5.

Stem shrubby, erect or a little flexuose, much branched, in our specimen from 3 to 4 feet high: *branches* spreading, elongated, more or less hairy, and clothed with a dense leprous tomentum, which by age becomes of a brownish grey, and is densely spotted with innumerable minute black specks. *Leaves* variable, when young quite white and hairy on both sides, sessile, obovate, or oblong, more or less undulate and twisted, a little oblique, three-nerved at the base, very rough and uneven, the margins very rough or denticulate; *lower ones* shortest and broadest, ovate or obovate, bluntly rounded, attenuated into a sort of footstalk at the base, clothed on both sides with a thin white tomentum: the next are narrower and longer, and less blunt, of a greener colour, less tomentose, not so narrow at the base, more undulate and twisted; *upper ones*, when young, quite white on both sides, much more hairy, sessile, and acute: *those on the flower-stems* quite sessile and clasping the stem, much broader, ovate, acute,

many-veined or lineate underneath, green on both sides, rough and hairy but not tomentose, longer than the peduncles, except when drawn up within doors. *Flower-stems* terminal or axillary, thickly clothed with unequal soft spreading weak hairs. *Peduncles* in a sort of panicle, terminal or axillary, 1 or 2-flowered, oftentimes in a sort of umbel, shorter than the leaf, at their base of a brownish purple colour, thickly clothed with soft spreading hairs that are purple at the base, the leaves at the base of the peduncles are fringed with purple hairs. *Calyx* of 3 sepals, densely clothed with rigid purple bristle-like hairs: *sepals* broadly ovate, acute, concave, with membranaceous edges, a little keeled at the back. *Petals* 5, broadly obovate, finely crenulate, very much overlapping each other, of a golden yellow, each with a large dark spot near the base, which branches a little. *Stamens* from 40 to 45, spreading: *filaments* smooth, unequal in length, of a bright yellow, with purple points: *anthers* dark purple before bursting: *pollen* orange-coloured. *Germen* densely tomentose. *Style* very short. *Stigma* large, capitate, pustulose.

For the opportunity of giving a figure of this handsome plant, we are obliged to Mr. J. Miller, of the Bristol Nursery, from whom we received it, and it is readily distinguished from all others of the section to which it belongs, by the stiff bristle-like purple hairs on the calyx; as far as we can judge by the description, we believe it to be the *H. rugosum* of Dunal, in Decandolle's Prodrômus, which is a native of Portugal. It succeeds well in a light soil, consisting of an equal portion of sandy loam and peat, and if planted by the side of a wall in a southern aspect, and covered with a mat in severe frost, it will succeed very well, or it may be grown in pots, and kept under glass in frames, or in the Greenhouse in frosty weather, but should be exposed to the air as much as possible when the weather is mild; the time of flowering is from June to August. Cuttings, planted under hand-glasses, in August or September, strike root readily.





HELIANTHEMUM formosum.

Beautiful Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmatē magno.*

H. formosum, caule fruticoso: ramis tomentoso-villosis canescentibus, foliis subpetiolatis obovato-lanceolatis tomentoso-villosis: junioribus incanis, pedunculis calycibusque villosis, calycibus trisepalis, petalis obcordatis valde imbricatis.

Helianthemum formosum. Dunal. ined. ex DC. prodr. 1. p. 268.

Swt. hort. brit. p. 34. n. 8.

Cistus formosus. Curt. bot. mag. 264. Willden. sp. pl. 2. p. 1188.

Pers. syn. 2. p. 75. Hort. Kew. ed. 2. v. 3. p. 306.

Stem shrubby, erect, much branched: *branches* erect or spreading, thickly clothed with a close dense white tomentum, and long hairs intermixed. *Leaves* opposite, crossing each other, very shortly petiolate or scarcely sessile, ovate, or obovately lanceolate, obtuse, underneath 3-nerved at the base, the nerves more or less branched: young ones densely clothed with a close white tomentum on both sides, and spreading villous hairs intermixed; old leaves smoother and greener, the hairs on them in stellate fascicles underneath, and spreading on the upper side. *Petioles* very short, villosely canescent. *Flowers* terminating the branches in a paniculate cyme. *Bractes* leaf-like, concave, becoming deciduous. *Peduncles* generally 3-flowered, villosely tomentose. *Pedicles* and *Calyx* densely clothed with a white tomentum, and long villous hairs intermixed; amongst these are other straight rigid purple hairs, which gives a brownish appearance. *Calyx* of 3 sepals, which are ovate, concave, tapering to a point, with scariose membranaceous margins, tinged with red on one side. *Petals* 5, obcordate, much imbricate, of a

bright yellow, with a large brownish purple spot near the base, lightest on the upper part, and slightly branched. *Stamens* about 40, overtopping the stigma, the inner ones longest: *filaments* slender, smooth, yellow: *pollen* orange-coloured. *Germen* downy. *Style* hid by the large *Stigma*, which is capitate, slightly 3-lobed, and papillose.

We believe the present to be the largest flowered species of the genus, and makes a handsome upright bushy Shrub, but will scarcely endure our Winters in the open air without protection; it makes a pretty plant for the Greenhouse, and succeeds well by the side of a wall in a southern aspect, so as to be protected with covering in Winter, thriving well in any rich light soil, and producing a great quantity of flowers in succession: plants of it may be preserved in pits or frames through the Winter, so as to be kept from the frost, they may then be turned into the borders in Spring, where they will make a fine appearance in Summer: young cuttings, planted under hand-glasses in Autumn, soon strike root; seeds also ripen in abundance; so that any quantity may be raised; but as the colour of the flowers vary considerably on different plants, the seeds should always be saved from those of the brightest colours.

Our drawing was made at the Nursery of Mr. Colvill, of the King's Road, Chelsea.





HELIANTHEMUM scabrosum.

Rough Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmatē magno.*

H. scabrosum, caule fruticoso erectiusculo, ramis tomentosis villosopilosis scabris canescentibus, foliis sessilibus basi attenuatis oblongo-ovatis acutiusculis scabriusculis trinerviis undulatis margine subrevolutis: supra viridiusculis subtus tomentoso-cinereis, calycibus 3-sepalis hirsutis, petalis distinctis.

Helianthemum scabrosum. Pers. syn. 2. p. 76. DC. prodr. 1. p. 268. Spreng. syst. 2. p. 587.

Cistus scabrosus. Hort. Kew. v. 2. p. 236. edit. 2. v. 3. p. 308. Brot. fl. lus. 2. p. 265. Willden. sp. pl. 2. p. 1192.

A handsome small bushy shrub, with spreading, rather crooked branches, that are densely clothed with bunches of short hairs, and long soft villous ones intermixed: as the hairs wear off, the stem becomes rough, the hairs being seated on a sort of small warts or tubercles, when young white or greyish, afterwards becoming brown. *Leaves* opposite, sessile, but attenuated or becoming gradually narrower towards the base, where they are three-nerved, oblongly ovate, or sometimes lanceolate, generally acute, but sometimes obtuse, very much undulate at the margins, which are generally reflexed or rolled backwards, hairy on both sides, and rough to the touch, particularly on the under side, upper side pale green, underneath very white while young, but becoming greener by age. *Stipules* none. *Flowers* bright yellow, without spots, terminating the branches, generally from 2 to 5 in a sort of panicle, which would probably be more numerous in a strong plant. *Bractes*

lanceolate, acute, very hairy. *Pedicles* scarcely so long as the longest leaves, densely clothed with short rough bristle-like hairs, and short down intermixed. *Calyx* of 3 sepals, that are ovate, concave, tapering to a long slender point, clothed with numerous short rough brown hairs, and short pubescence intermixed. *Petals* 5, distinctly spreading, not at all imbricate, of a bright golden yellow, very broad at the ends, but slightly retuse, and crenulate, tapering very much to the base. *Stamens* about 80, spreading: *filaments* unequal in length, bright yellow: *pollen* golden yellow. *Ovarium* rough, much punctated with small dots, clothed with a short pubescence, but glossy. *Style* short, hid by the large stigma. *Stigma* capitate, peltate, papillose.

Our drawing of the present species was made last Summer from a plant sent to us by Mr. J. Miller, from their extensive and valuable collection at the Bristol Nursery; and we have not met with it in any of the collections about London. It is a native of Portugal, and requires the same treatment as *H. formosum*, to be grown in a light sandy soil, and if planted in a sheltered situation, or by the side of a wall in a southern aspect, it will stand through the Winter without being injured; but should the Winter be very severe, it would be requisite to cover it with a mat in the hardest frost; or it may be grown in pots, which can be preserved in frames through the Winter, to be only covered up in frosty weather. Cuttings of it, planted under hand-glasses in August, will strike root readily, but as soon as rooted they will require to be hardened by degrees to the air, or they will otherwise damp off.





HELIANTHEMUM cheiranthoides.

Stock-like Sun-Rose.

Sect. I. HALIMIUM. *Supra fol. 4.*

** *Stylo subnullo, stigmatе magno.*

H. cheiranthoides, caule fruticoso erecto ramoso; ramis junioribus villosa-tomentosis incanis, foliis tomentosis cinereo-incanis oblongo-lanceolatis in petiolum attenuatis, pedunculis brevibus subbifloris, calycibus subvillosis 5-sepalis, sepalis externis minutissimis. *DC. prodr. v. 1. p. 268.*

Helianthemum cheiranthoides. Pers. syn. 2. p. 76. Spreng. syst. v. 2. p. 587. Swt. hort. brit. p. 35. edit. 2. p. 41.

Cistus cheiranthoides. Lamarck dict. 2. p. 19.

Cistus halimifolius II. *Clus. hist. 1. p. 71.*

A handsome bushy upright branching shrub: *branches* upright, thickly clothed with woolly hairs, that are seated on dark warts or glands. *Leaves* opposite, or the upper ones alternate, oblongly lanceolate, three-nerved, attenuated into a sort of petiole at the base, thickly clothed on both sides with a close white woolly pubescence, which gives them a white hoary appearance; the lower ones broadest, and bluntish; the upper ones narrow and acute. *Peduncles* generally 2-flowered, densely clothed with woolly hairs that are seated on small dark warts. *Flowers* bright yellow, with no spot of red or purple. *Calyx* of 5 sepals; thickly clothed with dense wool: the two outer ones very small, spreading: the three inner ones broadly ovate, inclining to heart shaped, terminated in a long taper point. *Petals* 5, obcordate, or broadly cuneate, hollow at the ends and uneven, imbricated over each other, spreading flat when fully expanded, of a plain bright yellow. *Stamens* nu-

merous, surrounding the germen : *filaments* orange-coloured ; *pollen* golden yellow. *Germen* conical, downy, terminated by a broad, nearly sessile, capitate Stigma.

The present handsome species is a rare plant in our collections ; the only one that we have seen of it was sent us by the kindness of Mr. J. Miller, from his Nursery at Bristol, a collection that is very rich in this handsome family of plants ; another fine strong growing species belonging to this section, *H. atriplicifolium*, with large glaucous leaves resembling *Atriplex Halimus*, has we believe quite disappeared from our collections, though we recollect when it was very abundant ; this is also the case with *Cistus Ledon*, which we do not remember having seen for the last ten years, many of those plants being lost, through their possessors not knowing what they were, and the protection that they require, and also by confusing them with others. The present species is nearly hardy, requiring only a slight covering in severe frosty weather, and some young plants of it may be grown in pots, to be protected in frames or the Greenhouse in Winter ; a light sandy soil suits it best, or, if grown in pots, a mixture of turfy loam and peat is most proper for it ; young cuttings, planted under hand-glasses, in a shady situation, any time through the Spring or Summer, will root readily ; and the sooner they are potted off after they are rooted, the better, or the glasses left off them, as they are very liable to damp off.





HELIANTHEMUM halimifolium.

Sea Purslane-leaved Sun-Rose.

Sect. I. HALIMIUM. *Calyx* 3-sepalus, sepalis æqualibus, rarò 5-sepalus, sepalis 2 externis minutis. *Petala* rarò alba, sæpissimè lutea, cuneata, truncata, sæpè basi maculà atro-sanguineâ vel intense luteâ notata. *Stylus* rectus brevis vel subnullus. *Stigma* capitatum subtrilobum. *Semina* nigrescentia, minutè muricata, pauca, subangulosa.—Suffrutices vel frutices. *Folia opposita trinervia exstipulata pilosa vel tomentosa.* *Pedunculi* 1-3-flori axillares solitarii vel umbellati, rarò paniculati. DC. prodr. 1. p. 267.

* * *Stylo* subnullo, *stigmatè* magno.

H. halimifolium, caule fruticoso erecto; ramis leproso-candidis, foliis utrinque leproso-candidis basi attenuatis subpetiolatis ovato-lanceolatis acutis undulatis, pedunculis longis ramosis subpaniculatis glabris aut subpilosis, calycibus sericeis 3-4-sepalis raro 5-sepalis, sepalis externis angustissimis subulatis.

Helianthemum halimifolium. DC. prodr. 1. p. 268.? *Hort. sub. lond.* p. 123.

Cistus halimifolius. Linn. sp. p. 524. Willd. sp. pl. 2. p. 1188. *Hort. Kew. ed. 2. v. 3. p. 307. Mill. ic. pl. 290.*

Helianthemum elongatum. Willd. enum. 2. p. 569. Link enum. 2. p. 75.

Stem 3 to 4 feet in height, shrubby, erect, much branched, densely clothed, with a close pressed canescent pubescence: *branches* opposite, crossing each other. *Leaves* opposite, oblong, or ovately lanceolate, acute, undulate, concave, the margins curved inwards, attenuated at the base into a kind of petiole, densely clothed on both sides with a close pressed canescent pubescence, obsoletely 3-nerved. *Peduncles* long, leafy, paniculately branching, smooth and glossy, with a few long slender spreading hairs scattered on them; lower leaves opposite, upper ones alternate. *Pedicles* long and slender, more or less hairy. *Calyx* of 3, 4, or 5 sepals, slightly clothed with a thin silky pubes-

cence, and sometimes with a few spreading hairs; *sepals* taper-pointed, outer ones small, subulate, often wanting. *Petals* 5, very broad, obcordate, slightly emarginate, imbricate, of a bright yellow, slightly spotted at the base. *Stamens* numerous. *Style* scarcely any. *Stigma* large, capitate, slightly lobed. *Capsule* villous, 3-valved. *Seeds* about 15 in each capsule, angular, light brown, warted.

Several different species appear to have been confused with the present, which is certainly the plant described in the Hortus Kewensis, and also the one meant by Linnæus, who refers to Miller's figure, which is a good representation of our plant; the spots on the petals are larger and darker than in ours, but we have seen them vary considerably on different plants. We are not so certain of the plant described by M. Decandolle being the same, the peduncles and calyx being described as white and leprous, which was not the case with ours. It is without doubt the *H. elongatum* of Willdenow's Enumeratio, but it cannot be the *H. cheiranthoides* of Decandolle, who gives the *Cistus elongatus* of Vahl, as a synonym with a mark of doubt. It is a native of the South of Europe, and requires protection from severe frost, either in a green-house or frame; the same kind of treatment as is recommended for *Cistus ladaniferus* and *C. candidissimus* will suit the present plant. Cuttings of it, planted under hand-glasses on a slight hot-bed, will strike root freely. It may also be raised from seeds, which sometimes ripen.

Drawn at the Nursery of Mr. Colvill, King's Road, Chelsea, last summer.





HELIANTHEMUM carolinianum.

Carolina Sun-Rose.

Sect. II. LECHEOIDES. *Supra fol. 11.*

** *Pedunculis ramealibus unifloris ebracteatis.*

H. carolinianum, caulibus herbaceis hirsutis erectis, foliis tomentoso-hirsutis subdenticulatis breviter petiolatis obtusis: inferioribus oppositis obovalibus: ceteris alternis oblongo-ovatis, pedunculis solitariis unifloris hirsuto-candidis, calycibus hirsutis, sepalis internis oblongis acutis. *DC. prodr. 1. p. 269.*

Helianthemum carolinianum. Mich. flor. bor. amer. 1. p. 307. Pers. synops. 2. p. 77. Pursh flor. amer. sept. 2. p. 364. Swt. hort. brit. p. 35. n. 17. Spreng. syst. 2. p. 588.

Cistus carolinianus. Walt. flor. carol. 152. Venten. cels. t. 74.

Root perennial, somewhat creeping. *Stems* several from the same root, erect, branching, very hairy, from 6 inches to a foot in height, the greater part dying back in Winter, and fresh ones coming up in Spring: *branches* slender, very hairy, when young clothed with a hoary tomentum, more or less tinged with purple. *Leaves* alternate or the lower ones opposite, shortly petiolate, hairy, and clothed with a whitish tomentum, and numerous fascicles of hairs, rough, the margins somewhat denticulate, variable in form, but all obtuse: lower ones generally opposite, and ovate or obovate; the others alternate and oblong or ovate, not so much rounded at the points. *Peduncles* thickly clothed with little stellate bunches of white hairs, as is also the calyx. *Flowers* large, solitary, terminating the small branches, pale yellow. *Calyx* of 5 long taper-pointed sepals, green, or tinged with a purplish brown, very hairy: outer ones narrow, linear, but broadest towards the base; inner

ones ovate, concave inwards, but terminating in a long taper point. *Petals* 5, obovate or obcordate, narrowing towards the base, distinct or but slightly imbricate. *Stamens* about thirty, spreading: *filaments* bright yellow: *pollen* orange-coloured. *Germen* smooth, triangular, terminated by a very short style, that is hid by the large capitate stigma. *Capsule* smooth and glossy, 3-valved, several-seeded.

The present beautiful plant is a native of Carolina, and requires to be grown in peat soil; it should be preserved through the Winter in frames, or in the Greenhouse, or it will be liable to be killed in severe frosty weather; in Winter it dies down to the root, and comes up again the following Spring; this is the case with all the North American species, by which means they are frequently lost, as the cultivators of them suppose they are quite dead, and turn them out of the pots as such: it is readily increased by young cuttings, planted under hand-glasses in Spring, the young plants to be potted off as soon as sufficiently rooted, that they may be enabled to become strong enough to stand through the Winter; it may also be raised from seeds, which ripen in abundance.

Our drawing was made from fine specimens, communicated by A. B. Lambert, Esq.





HELIANTHEMUM canadense.

Canada Sun-Rose.

Sect. II. LECHEOIDES. *Supra, fol. 11.*

** *Pedunculis ramealibus unifloris ebracteatis.*

H. canadense, caule erecto apice ramoso: ramis hirsutis, foliis hirsutis inferioribus oppositis oblongis obtusis planis: superioribus alternis oblongo-lanceolatis acutis subtus subtomentoso-canis margine vix revolutis, pedunculis hirsutis unifloris solitariis, sepalis internis ovatis acuminatis, petalis obcordatis valde imbricatis, staminibus 20-22 decumbentibus.

Helianthemum canadense. Mich. fl. amer. 1. p. 307. Pursh fl. amer. sept. v. 2. p. 363. DC. prodr. 1. p. 269. Pers. syn. 2. p. 77. Spreng. syst. veg. 2. p. 588?

Cistus canadensis. Willden. sp. pl. 2. p. 1199. Hort. Kew. ed. 2. v. 3. p. 310.

Perennial, herbaceous. *Stems* several from the same root, erect or ascending, branching on the upper part, of a purplish brown colour, clothed with soft woolly hairs. *Leaves* hairy; lower ones opposite, oblong or ovate, obtuse, flat: upper ones alternate, narrower, oblongly lanceolate, acute, underneath thinly clothed with a white tomentum, margins slightly revolute, rough and uneven, but scarcely crenulate, fringed with very short hairs. *Petioles* very short, hairy. *Peduncles* one flowered, solitary, erect, thickly covered with unequal spreading hairs, of a brownish purple colour. *Calyx* of 5 sepals, 2 outer ones very small, subulate, very hairy and fringed: inner ones narrowly ovate, taper-pointed, concave, very hairy and ciliate, the points tipped with red. *Petals* 5, obcordate, scarcely crumpled, margins rather uneven, very much imbricate, of a bright yellow colour. *Stamens* from 20 to 22, spreading flat: *filaments* unequal in length, long and slender, bright yellow: *pollen* dark yellow. *Germen* smooth and glossy. *Style* very

short, straight, nearly hid by the large capitate stigma. *Stigma* 3-lobed, papillosely fimbriate.

This very pretty herbaceous perennial species is a native of North America, and succeeds best in peat soil, either to be planted in a bed amongst other American plants, or to form a patch by itself in a border of the flower garden; it will also succeed very well in rock-work, but the soil in which it is planted must be chiefly peat, and care must be taken that it is not killed by the drought in Summer. Its handsome flowers are produced in abundance in July and August; after that time it continues to bloom and ripen seeds plentifully until October; but the flowers after August are all without petals, the calyx and capsules are also smaller and of a different form from those produced by the flowers with petals; this is also the case with *H. polygalæfolium* and *brasiliense*, and we expect with the whole of this section.

The present plant is sufficiently hardy to endure our Winters in the open air without protection; but as it dies down to the ground in Winter, many people might suppose it was dead, and have it thrown away, particularly when grown in pots, as no signs of life appear in it at that season; therefore, if grown in pots, they should have the name wrote on labels of some kind, to ensure preservation. Seeds of it ripen plentifully; but they must be gathered as soon as ripe, as the capsule soon bursts, and the seeds are then lost; the best time for sowing them is early in Spring; they should be sown in pots, and as soon as up should be pricked out, either separately or several in one pot, or they will be very liable to damp off if left too long in the seed-pot. Drawn at the Nursery of Mr. Colvill, in July last.





HELIANTHEMUM brasiliense.

Brazilian Sun-Rose.

Sect. II. LECHEOIDES. *Supra fol. 11.*

** *Pedunculis ramealibus unifloris ebracteatis.*

H. brasiliense, caule suffruticoso basi ramoso; ramis adscendentibus subsimplicibus hirsuto-tomentosis, foliis ovato-oblongis acutis sessilibus hirsutis, pedunculis calycibusque hirsuto-canescens, pedunculis solitariis unifloris aut laxe racemosis folio brevioribus, sepalis internis ovatis longe acuminatis apice subrecurvis, petalis obcordatis crenulatis.

Helianthemum brasiliense. Pers. syn. 2. p. 77. DC. prodr. 1. p. 269.

Swt. hort. brit. add. p. 468. n. 86.

Cistus brasiliensis. Lam. dict. 2. p. 22.

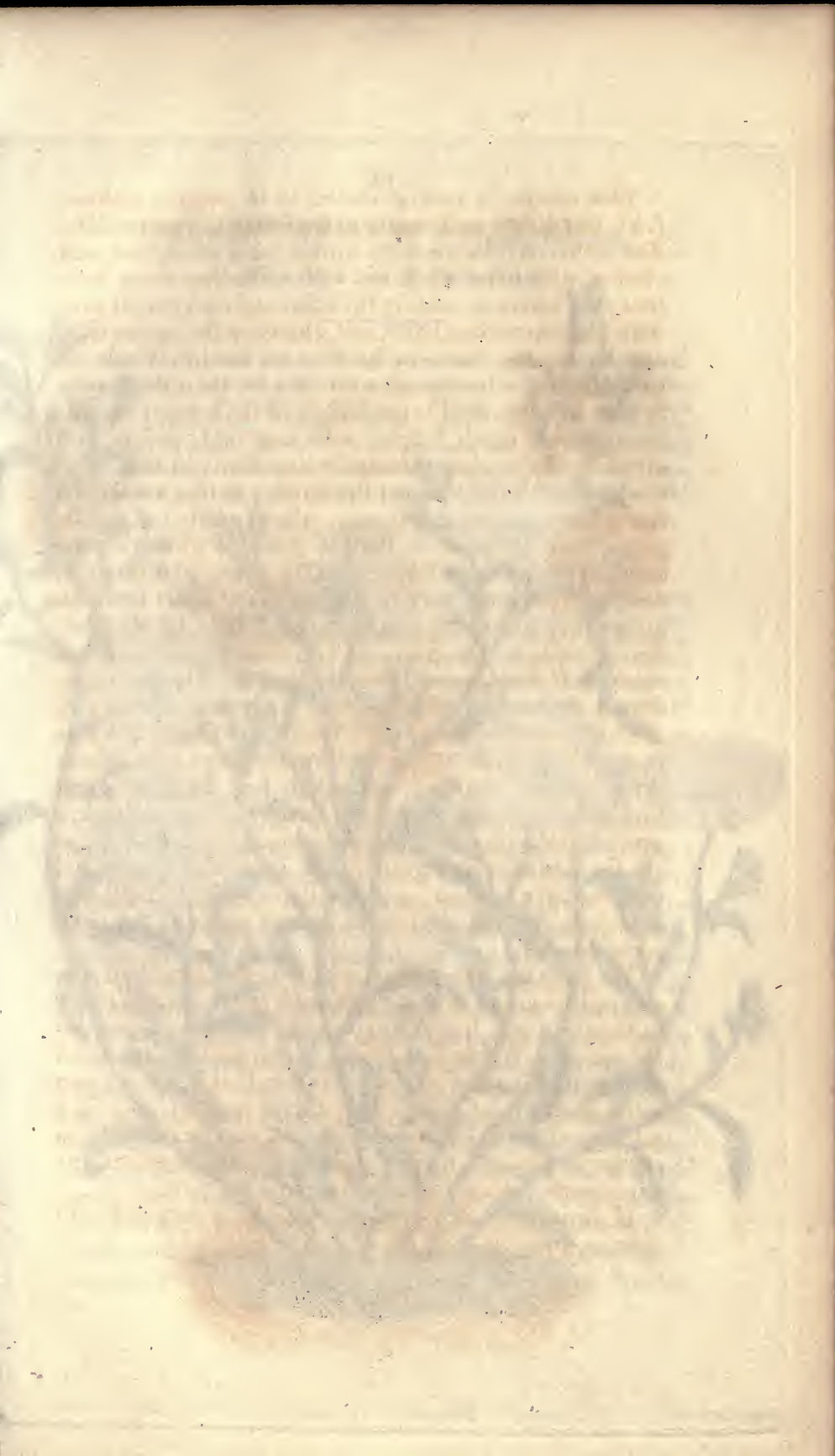
Cistus alternifolius. Vahl. symb. 1. p. 38.

Stems suffruticose, branched from the base: *branches* slender, at first upright, but at length becoming procumbent, as they cannot support their weight, the points ascending, thickly clothed with loose wool and a few hairs intermixed, the older branches a little warted. *Leaves* alternate, sessile, oblongly ovate, acute, thickly clothed all over with long spreading hairs: upper ones narrowest, sometimes lanceolate, of a dull green colour, not glossy as in *H. polygalæfolium*. *Flowers* lateral, solitary, opposite to a leaf, or terminating the branch in a loose few flowered raceme, which is sometimes forked; the strong branches sometimes also produce flowering shoots, or racemes in the axils of the upper leaves. *Peduncles* shorter than the leaves, densely covered with white wool. *Bractes* none. *Calyx* of 5 sepals, the points a little recurved, the 3 inner ones ovate, with long taper points, thickly clothed with dense white wool: the 2 outer ones shorter, very narrow, subulately linear. *Petals* 5, obcordate, notched at the points, at first imbricate, afterwards becoming distinct, and widely spreading, of a light yellow, darker at the base. *Stamens* from 30 to 32, spreading flat at first, afterwards becoming bent inwards: *filaments* smooth, yellow. *Pollen* orange-coloured. *Ger-men* smooth and glossy. *Style* very short. *Stigma* very large, capitate, papillose.

This species is nearly related to *H. polygalæfolium*, f. 11, but differs sufficiently in the following particulars. The stems of this are more upright and straighter, and clothed with loose wool, not with spreading hairs, as in that; the leaves in this are broader, and covered all over with long spreading hairs, not glossy on the upper side, and having the hairs in fascicles on the lower side, as in that; the peduncles here are shorter than the leaves, in that they are double the length of the leaves; the calyx in this is much longer, with long taper points, and clothed with a close pressed tomentum; in that it is clothed with bristly hairs; the flowers in this are larger, the stamens more numerous; the capsule in this is larger and pointed, in that it is nearly globular; the seeds in this are also larger, and the young plants, when first up from seed, may be distinguished apart immediately; they were both sent from the Brazils, by Mr. Frederick Sello to Dr. Sims, as two distinct species, one marked *Helianthemum*, 19, the other 48. Dr. Sims presented the seed to Mr. William Anderson, Curator of the Apothecaries' Company's Garden, at Chelsea, where they were sown in 1823; and from a plant raised from it the present drawing was taken last May, the first time that it produced perfect flowers; those that were produced the preceding Autumn being all apetalous, as are the Autumn flowers of all the species of this section that we have had an opportunity of seeing; but those apetalous flowers produce as perfect seeds as the complete flowers.

We have not yet proved whether the Brazilian species of this genus are hardy enough to bear our Winters in the open air, but at any rate they may be preserved through the Winter in a frame, as we see they are much drawn in a Greenhouse, which proves that it is too warm a temperature for them; they thrive well in pots in a mixture of sandy loam and peat, and may be raised from cuttings, planted under a hand-glass in Autumn, or from seeds, which ripen in abundance.

H. brasiliense of Sprengel, must be a very different species, judging from his description.





HELIANTHEMUM polygalæfolium.

Milkwort-leaved Sun-Rose.

Sect. II. LECHEOIDES. *Calyx* 5-sepalus, sepalis externis linearibus angustis, internis acutis margine scariosis. *Petala* lutea. *Stylus* subnullus vel brevissimus erectus. *Stigma* magnum capitatum. *Ovarium* triangulare. *Capsula* glabra, nitida, trivalvis, unilocularis. *Semina* rufescentia, parva.—Caules perennes herbacei vel suffruticosi ascendentes seu erecti, sæpe dichotomi. Folia inferiora opposita; caulina alterna, penninervia, breviter petiolata, sessilia, exstipulata. DC. prodr. 1. p. 269.

** *Pedunculis ramealibus unifloris ebracteatis.*

H. polygalæfolium, caule suffruticoso flexuoso-adscendente ramoso: ramis gracilibus hirsuto-tomentosis subcanescentibus, foliis caulinis sessilibus alternis acutis ciliato-hirsutis nitidis: inferioribus oblongo-lanceolatis: superioribus lanceolato-linearibus, pedunculis unifloris foliis longioribus calycibusque hirsuto-canescenscentibus, sepalis internis ovato-lanceolatis acuminatis, petalis obcordatis concavis crenulatis basi imbricatis.

Perennial. *Stems* several from the same root, elongated, very much branched, suffruticose, flexuose, slender, branching in various directions, ascending: *branches* thickly clothed with a kind of villous tomentum, and a few hairs intermixed. *Leaves* on the branches, without stipules, alternate, sessile, acute, hairy on both sides, fringed, of a dark glossy green on the upper side, and paler underneath; channelled on the upper side, the under side covered with tufts of starry hairs and longer ones intermixed: *lower leaves* oblongly-lanceolate, upper ones narrower, lanceolately linear, acute, concave. *Peduncles* 1-flowered, opposite to a leaf, and longer than the leaves, clothed with numerous fascicles of starry canescent hairs, and a few longer ones intermixed. *Calyx* of 5 sepals, the 2 outer ones very small, linear, bluntish, setosely hairy, inner ones ovately-lanceolate, taper-pointed, the points tipped with red; the inner margin scariosa and membranaceous, thickly clothed with rather decumbent bristly

11
hairs. *Petals* 5, or sometimes 6, broadly obovate or obcordate, slightly notched, concave, slightly imbricate at the base, of a bright yellow. *Stamens* about 24, unequal in length, spreading: *filaments* smooth, pale yellow, overtopping the stigma: *pollen* orange-coloured. *Germen* smooth. *Style* straight, very short. *Stigma* very large, capitate, papillose.

Had we not seen *H. brasiliense* growing by the side of the present plant, we should have been inclined to have given it for that species, as the description given of that by M. Decandolle differs but little from our present subject, but it still agrees better with what we consider the true *H. brasiliense*; plants of both species were raised from seed, the year before last, by Mr. Anderson, at the Apothecaries' Company's garden, at Chelsea, where our drawing was made last July; the seeds were given to him by Dr. J. Sims, who received them from Mr. Frederick Sello, by whom they were collected in the Brazils, and Mr. Anderson informs us that they are the best things he has yet sent; the present plant differs from *H. brasiliense* in being much more smooth and slender, its branches are more decumbent, the leaves less pubescent, of a glossy green, and narrower, and the capsules scarcely half the size; we have not seen any perfect flowers of *H. brasiliense*, as it did not bloom till autumn, and the flowers were all apetalous, which was also the case with the autumn flowers of the present species, and all the other species of this section that we have had an opportunity of examining this season; the apetalous flowers all produce perfect seeds, but we do not understand the reason of their producing perfect flowers only in summer.

This plant, as well as *H. brasiliense*, will require to be kept in a cool part of the Greenhouse, or in frames, in frosty weather, or they will be liable to be injured, though perhaps they will prove quite hardy, as we observe they draw up very weak in the Greenhouse; they thrive well in a mixture of turfy loam, peat, and sand; and young cuttings taken off at a joint, and planted under hand-glasses, will soon strike root; plants may also be raised from seeds.



HELIANTHEMUM glomeratum.

Cluster-flowered Sun-Rose.

Sect. II. LECHEOIDES. *Supra fol. 11.*

* *Pedunculis multifloris axillaribus seu terminalibus ; floribus parvis confertis.*

H. glomeratum, caule suffruticoso subdichotomo, ramis subtomentoso-cinereis, foliis lanceolato-oblongis basi attenuatis subtus præcipue incanis, racemis axillaribus terminalibusve multifloris foliis minoribus, floribus glomeratis. *DC. prodr. 1. p. 269. n. 16.*

Helianthemum glomeratum. Spreng. syst. 2. p. 588. n. 23. Swt. hort. brit. ed. 2. p. 41. n. 17.

Cistus glomeratus. Lagasca gen. et spec. p. 16.

Stem suffrutescent, erect, much branched : *branches* erect, flexuose, densely clothed with short hairs, and white down underneath, forked at the points, and branching again in all directions. *Leaves* alternate, sessile, or on very short pedicles, deciduous or dropping off in Winter, oblong, the lower ones largest and nearly ovate, obtuse, the upper ones lanceolate and more acute, all attenuated towards the base, hoary on both sides, but whitest underneath, thickly clothed on both sides with tufts of short hairs, that are seated on little tubercles, which causes a roughness on the leaf when examined with a lens. *Petioles* very short, furrowed a little on the upper side and rounded below, densely pubescent. *Flowers* numerous, crowded in dense clusters in the axils of the leaves, and terminal, so as to appear like an interrupted spike or raceme ; in our plant always apetalous, nearly sessile, or on very short footstalks. *Calyx* of 5 sepals, densely clothed with short hairs that are seated on minute tubercles, of a hoary appearance : two outer ones very small, spreading ; the three inner ones ovate,

acute, concave. *Capsule* 3-sided, 3-celled, smooth and glossy. *Seeds* few, small, somewhat flattened on one side and convex on the other, of a yellowish brown colour.

This curious little plant is a native of Mexico, and was raised from seed brought from that country by Mr. Bullock, who parted with them to Mr. Tate, of the Sloane Street Nursery, and from a plant raised by him, the present figure was made: like all the other American species that we have yet seen or heard of, it belongs to the section *Lecheoides* of Decandolle: all the species of which produce flowers with petals, in the Spring and early in Summer, whereas all those that are produced in Autumn, which are much more numerous, are all apetalous: the present plant has never produced its Spring flowers with us, most probably by being killed back a good way in Winter, so that it has had to make new shoots for flowering, and those have always produced their flowers in Autumn for three years following, they have all been apetalous like those in our figure, but have ripened seeds annually: if the plant was kept in an airy part of the Greenhouse in Winter, or in the window of a light room, so that its shoots might not be killed back, it would most probably bear plenty of perfect flowers in Spring, the same as *H. polygalæfolium*, *H. brasiliense*, *H. carolinianum*, and the other American species; it grows freely in an equal mixture of turfy loam, peat, and sand; and young cuttings, planted under hand-glasses, in Spring, root readily; they may also be raised from seeds.



HELIANTHEMUM lignosum.

Hard-wooded Sun-Rose.

Sect. III. TUBERARIA. *Supra fol. 18.*

* *Perennia, raro fruticosa; foliis omnibus exstipulatis, caulibus basi pilosis supernè glabris, floribus paucis bracteatis subpaniculatis.*

H. lignosum, caule tetragono fruticoso lignoso: cortice rugoso-squamosa; ramis adscendentibus piloso-hispidis, foliis ovato-oblongis in petiolum desinentibus trinerviis piloso-hispidis scabris canescentibus subtus nervosis supra sulcatis: floralibus sessilibus glabris oblongo-lanceolatis superioribus alternis, pedicellis basi bracteatis paucis subpaniculatis longitudine calycis, petalis obovatis distinctis patentibus.

Helianthemum lignosum. *Swt. hort. brit. add. p. 469. n. 88.*

Stem shrubby, erect, very hard and ligneous, branching, clothed with a hard brown rugged scaly bark, sometimes cracking longitudinally, obtusely 4-sided, here and there knotted where the branches have died away: *branches* ascending, soon becoming hard and woody, and appearing rugged from the persistent bases of the decayed leaves, clothed with long bristly hairs. *Leaves* crowded, opposite, oblongly ovate, acute, attenuated at the base down the petiole, strongly 3-nerved underneath, and deeply 3-channelled on the upper side, clothed underneath with a dense white tomentum, and the nerves with long spreading, white hairs; upper side very rough when rubbed backward, and densely covered with canescent decumbent bristly hairs, and short down intermixed. *Flowering branches* ascending, densely clothed with long villous hairs on the lower part, the upper part smooth, and slightly glaucous: *leaves* on the lower part opposite, sessile, ovately oblong, smooth on the upper side, and hairy underneath: upper ones alternate, sessile, glaucous, smooth,

elliptic, concave, acute. *Racemes* terminal, sometimes paniced, few-flowered. *Bractes* oblongly lanceolate, concave, acute, keeled at the back, smooth and glaucous. *Pedicles* smooth, about the length of the calyx, more or less tinged with red, not transparent, and 3 times the length of the calyx as in *H. tuberaria*, nodding before flowering, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, which are smooth and glaucous, 2 outer ones very small, subulate; the inner ones broadly ovate, concave, acute, tipped with red, their margins scariose and membranaceous. *Petals* 5, obovate, with rounded points, distinct or slightly imbricate at the base, much spreading. *Stamens* from 40 to 50, spreading, the outer ones shortest: *filaments* smooth and slender, pale yellow: *pollen* orange-coloured. *Germen* downy. *Style* very short, hid by the large stigma. *Stigma* capitate, granular.

Our drawing of this curious plant was made from one at the Garden belonging to the Apothecaries' Company at Chelsea, where it was first raised from seeds given to Mr. Anderson by Mr. George Don, who informs us that it was cultivated in his father's garden at Forfar, a great many years back, as *H. tuberaria*, but he is not certain from whence he first obtained his seeds: it is rather tender, requiring the protection of a frame or Greenhouse in Winter, succeeding well in a mixture of sandy loam and peat, and is readily increased by seeds, which ripen plentifully.





HELIANTHEMUM Tuberaria.

Plantain-leaved Sun-Rose.

Sect. III. TUBERARIA. *Calyx* 5-sepalus, sepalis externis minoribus vel majoribus sæpè patulis. *Petala* lutea, sæpè basi maculâ atropurpureâ notata, integra vel denticulata, serrata. *Stamina* numerosa pistillo multo longiora. *Stylus* rectus subnullus. *Stigma* capitatum. *Capsula* trivalvis. *Semina* minuta flavescentia.—*Radices* perennes lignosæ seu herbacæ annuæ. *Caules* herbacei erecti seu adscendentes. *Folia* trinervia opposita exstipulata, superiora interdum alterna, sæpius stipulata, stipulis longis lineari-acutis. *Flores* subpaniculati vel racemosi secundi bracteati vel ebracteati. DC. prodr. 1. p. 270.

* *Perennia* raro fruticosa, foliis omnibus exstipulatis, caulibus basi pilosis supernè glabris, floribus paucis bracteatis subpaniculatis.

H. *Tuberaria*, perenne, ramoso, caulibus adscendentibus subsimplicibus, foliis radicalibus in petiolum desinentibus ovato-oblongis trinerviis tomentoso-hirsutis canescentibus subtus nervosis supra sulcatis; caulinis sessilibus subglabris lanceolatis: summis alternis, pedicellis basi bracteatis paucis subpaniculatis calyce triplo longioribus, calycibus glabris nitidis, petalis obovatis distinctis patentissimis.

Helianthemum Tuberaria. DC. prodr. 1. p. 270. Pers. syn. 2. p. 77.

Mill. dict. n. 10. Willd. enum. 2. p. 570. Spreng. syst. 2. p. 587.

Cistus Tuberaria. Lin. spec. 741. Cavan. icon. 1. p. 65. t. 67. Willd. sp. pl. 2. p. 1197.

Perennial, herbaceous, branching round in all directions: *branches* short, very hairy at the base: flowering ones lengthening out, ascending, quite smooth, of a pale glaucous green. *Leaves* near the root opposite, oblongly-ovate, obtuse, attenuated at the base and down the petiole, strongly 3-nerved underneath, and furrowed with 3 deep channels on the upper side, slightly canescent, clothed underneath with a short white tomentum, the nerves very hairy: upper side hairy and rough, the hairs decumbent, and the roughness occasioned by innumerable minute warts that are scattered all over the surface. *Petioles* deeply channelled on the

upper side, and keeled on the lower, furrowed on each side, thickly clothed with bristly hairs: *leaves on the flowering stems* sessile, smooth and glaucous, more acute, concave, lower ones opposite, the upper ones alternate. *Racemes* terminal, sometimes paniced. *Bractes* lanceolate, acute, concave, keeled at the back, smooth and glaucous. *Pedicles* long and slender, smooth, transparent at the base, nodding before flowering, erect when in bloom, afterwards reflexed. *Calyx* of 5 smooth, glaucous sepals, the 2 outer ones very small, subulate: inner ones cordately ovate, acute, concave, with scarious, membranaceous margins. *Petals* 5, obovate, slightly crenulate, distinct and widely spreading, of a bright light yellow, darker near the base. *Stamens* about 50, inner ones overtopping the stigma, outer ones much shorter: *filaments* smooth, light yellow: *pollen* orange-coloured. *Germen* downy. *Style* very short, scarcely any. *Stigma* large, capitate, granular.

A handsome herbaceous perennial plant, which succeeds best in rock-work in sandy soil; as it is a native of the South of Europe, it is rather tender, and should be planted in a southern aspect, but it will suffer more from too much moisture than from cold, for if planted out in the common borders it thrives well all the Summer, but will seldom survive the Winter, as its roots get rotten with too much wet.

Plants of it grown in pots, and kept in frames through the Winter, may be turned out in the borders in Spring, where they will flower profusely, and will ripen their seeds; they succeed well in an equal mixture of turfy loam and peat, or any other light sandy soil, and are increased freely by seeds, which ripen in abundance. Our drawing was taken from a plant that we received from the Nursery of Mr. Joseph Knight, last Summer. We have a drawing of a very curious nearly related species, but quite shrubby, and of a hard woody texture, which we received from the collection at the Apothecaries' Company's Garden at Chelsea.





HELIANTHEMUM eriocaulon.

Woolly-stalked Sun-Rose.

Sect. III. TUBERARIA. *Supra, fol. 18.*

** *Annua, foliis superioribus sæpe stipulatis, racemis secundis terminalibus.*

H. eriocaulon, caule herbaceo ramoso di-trichotomo hirsutissimo, foliis oblongo-linearibus angustis hirsutis oppositis: superioribus stipulatis: extremis alternis, racemis simplicibus ebracteatis, pedicellis filiformibus longis pilosis, sepalis externis angustis. *Dunal in DC. prodr. 1. p. 271.*

Helianthemum eriocaulon. *Swt. hort. brit. p. 35. n. 21.*

Annual. *Root* fibrous. *Stems* erect, branching, from 6 inches to a foot in height; 2 or 3-forked, thickly clothed with long spreading white hairs, and short down underneath. *Leaves* oblongly-linear, 3-nerved from the base, clothed on both sides with long spreading hairs, and with fascicles of short stellate ones underneath, rough and punctate, with numerous small dots; lower ones opposite, bluntish, without stipules: upper ones alternate, acute, with long stipules. *Stipules* long, linear, the margins a little reflexed, very hairy, and fringed. *Racemes* terminal, many-flowered, without bractes, the flowers all facing one way, nodding before the flowers expand, afterwards becoming erect. *Pedicles* long and slender, nodding before the expansion of the flowers, erect when in bloom, afterwards reflexed and lengthening, clothed with short down and long hairs intermixed. *Calyx* of 5 sepals, the 2 outer ones smallest, oblong, obtuse, the margins reflexed, and fringed with long white hairs: 3 inner ones ovate, acute, concave, membranaceous, clothed with long spreading white hairs, and short down underneath, warted near the base with 10 to 12 small black warts. *Petals* 5, distinctly spread-

ing, more than double the length of the calyx, the margins finely serrated, of a pale yellow, with a dark purple spot near the base. *Stamens* from 20 to 25, spreading; *filaments* unequal in length, smooth, pale yellow: *pollen* yellow. *Germen* smooth and glossy. *Style* short, erect, hid by the large capitate papillose white *Stigma*.

This pretty annual plant is grown in many of the collections about London as *H. guttatum*, which seems to be a much scarcer plant; that ours is the true *H. eriocaulon* of Decandolle's Prodrômus, we have satisfied ourselves by examining the specimens referred to by him in Mr. Lambert's Herbarium, where specimens of both species are preserved; and they are certainly very different, although Professor Sprengel has again united them, most probably without seeing either. M. Lagasca, who saw our drawing, immediately recognised it as the *H. eriocaulon*, before we examined the specimens: it is a native of Spain and the South of Europe, and only requires to be sown in the open ground like any other hardy annual; where it will flower and ripen abundance of seeds. Plants of it are now in full bloom in our garden, from seeds sown in May last. Any person who wishes to preserve specimens of this plant, should gather them in the morning as soon as they open; for if left until the anthers burst, which they very soon do, the stigma immediately becomes fertilized, and the petals will not then remain on. Our drawing was made at Mr. Colvill's Nursery, last Summer.





HELIANTHEMUM punctatum.

Spot-flowered Sun-Rose.

Sect. III. TUBERARIA. *Supra fol. 18.*

** *Annua, foliis superioribus sæpè stipulatis, racemis secundis terminalibus.*

H. punctatum, caule herbaceo ramoso dichotomo tomentosiusculo-pubescente subcinereo, foliis oblongis penninerviis viridi-cinereis breviter piloso-scabriusculis; pilis stellatis minimis: inferioribus oppositis obtusis: superioribus alternis acutiusculis stipulatis, racemis longis pubescentibus cinereis, petalis obovatis crenulatis distinctis.

Helianthemum punctatum. Pers. syn. 2. p. 77. Willd. enum. 2. p. 570.

DC. prodr. 1. p. 271. Spreng. syst. 2. p. 588. Swt. hort. brit. p. 35.

Cistus punctatus. Willden. spec. pl. 2. p. 1199.

Annual. Stem herbaceous, very much branched from the base, the centre stem erect: *branches* spreading, canescent, generally forked, spreading, the points ascending, thickly clothed with stellate fascicles of short hairs.

Leaves petiolate, of a greyish colour, strongly penninerved underneath, with 5 to 8 prominent nerves, also clothed with starry bunches of short hairs: lower ones opposite, oblong, bluntly rounded, the upper ones alternate, narrower, and the points more acute. *Petioles* flattened on the upper side, and slightly keeled on the lower, also clothed with little stellate bunches of hairs.

Stipules unequal in size, lanceolate, acute, clothed with the same sort of hairs, and fringed. *Racemes* terminal, leafy or bracteate, erect, in our plants many-flowered.

Flowers all leaning to one side. *Pedicels* slender, erect, clothed with a short hoary pubescence, each opposite to a leaf or bracte. *Calyx* of 5 sepals, thickly clothed with a short canescent pubescence, the two outer ones small, spathulate, narrow at the base, the three inner ones

ovate, concave, acute, membranaceous, with three or four strong nerves. *Petals* 5, narrow, about the length of the sepals, obovate, slightly notched at the points, distinctly spreading, of a light yellow, with a small saffron coloured spot near the base. *Stamens* 15 to 20, spreading, longer than the style. *Germen* three-sided, pubescent. *Style* short, erect. *Stigma* large, capitate, fimbriate.

This pretty little species is a native of France, and a hardy annual, and only requires to be sown in the open borders in April, and to be kept free from weeds; it will then continue to flower all the Summer, and will ripen plenty of seeds. We first received plants of it from Mr. W. Anderson, Curator of the Apothecaries' Company's Garden, at Chelsea, in 1826, but they had been raised from seeds so late in the Summer, that the flowers they produced were all apetalous, but those produced abundance of seeds, some of which we sowed in April 1827; the plants from which produced abundance of perfect flowers, and from one of those the present figure was made.





HELIANTHEMUM ledifolium.

Ledum-leaved Sun-Rose.

Sect. V. BRACHYPETALUM. *Calyx* 5-sepalus, sepalis externis minutis, internis trinerviis acuminatis. *Petala* lutea, interdum basi maculata, parva, sæpè calyce breviora. *Stamina* pauca 10-20, ovarium cingentia. *Stylus* rectus et erectus apice incrassatus. *Stigma* simplex. *Ovarium* triquetrum, angulis sæpè pilosis. *Capsula* triquetra, subnitida. *Semina* numerosa, minuta, pallida, angulosa.—Herbæ annuæ. Folia stipulata, petiolata, penninervia, subdenticulata, opposita, floralia alterna. Stipulæ oblongo-lineares, superiores longiores. Pedunculi uniflori, breves, solitarii, rarè axillares, sæpius oppositifolii vel oppositibractei, suberecti, horizontales vel retrofracti. DC. prodr. 1. p. 271.

* *Pedunculis suberectis foliis brevioribus, sepalis internis trinerviis.*

H. ledifolium, caule herbaceo, ramis pubescentibus erectis vel ascendentibus, foliis oppositis breviter petiolatis oblongo-ellipticis subdenticulatis glabriusculis junioribus stellato-pubescentibus; superioribus alternis floribus oppositis, omnibus stipulatis, pedunculis erectis et calycibus acuminatis pubescentibus, capsulis magnis glabris.

Helianthemum ledifolium. DC. prodr. 1. p. 272. Spreng. syst. v. 2. p. 589. n. 34. Pers. syn. 2. p. 7. Swt. hort. brit. p. 35. n. 26.

Cistus ledifolius. Linn. spec. 742. Smith Engl. bot. 2414. Comp. fl. brit. ed. 4. p. 95.

Annual. Stem erect, simple, or scarcely branched, smoothish, or sometimes clothed with short loose pubescence, from 4 inches to a foot in height. *Leaves* opposite, with short footstalks, the upper ones alternate, oblongly elliptic, bluntish, denticulate, old ones smoothish, glossy; young ones clothed with a short tomentum, and fascicles of short starry hairs, nerve underneath pinnately branched: upper side of a bright green, underneath paler, margins clothed with little fascicles of short hairs, which are seated on minute tubercles, or small teeth. *Petioles* clothed with little tufts of hairs. *Stipules* large, leaf-like, lanceolately linear, taper-pointed,



HELIANTHEMUM ledifolium.

Ledum-leaved Sun-Rose.

Sect. V. BRACHYPETALUM. *Calyx* 5-sepalus, sepalis externis minutis, internis trinerviis acuminatis. *Petala* lutea, interdum basi maculata, parva, sæpè calyce breviora. *Stamina* pauca 10-20, ovarium cingentia. *Stylus* rectus et erectus apice incrassatus. *Stigma* simplex. *Ovarium* triquetrum, angulis sæpè pilosis. *Capsula* triquetra, subnitida. *Semina* numerosa, minuta, pallida, angulosa.—Herbæ annuæ. Folia stipulata, petiolata, penninervia, subdenticulata, opposita, floralia alterna. Stipulæ oblongo-lineares, superiores longiores. Pedunculi uniflori, breves, solitarii, rarè axillares, sæpius oppositifolii vel oppositibractei, suberecti, horizontales vel retrofracti. DC. prodr. 1. p. 271.

* *Pedunculis suberectis foliis brevioribus, sepalis internis trinerviis.*

H. ledifolium, caule herbaceo, ramis pubescentibus erectis vel ascendentibus, foliis oppositis breviter petiolatis oblongo-ellipticis subdenticulatis glabriusculis junioribus stellato-pubescentibus; superioribus alternis floribus oppositis, omnibus stipulatis, pedunculis erectis et calycibus acuminatis pubescentibus, capsulis magnis glabris.

Helianthemum ledifolium. DC. prodr. 1. p. 272. Spreng. syst. v. 2. p. 589. n. 34. Pers. syn. 2. p. 7. Swt. hort. brit. p. 35. n. 26.

Cistus ledifolius. Linn. spec. 742. Smith Engl. bot. 2414. Comp. fl. brit. ed. 4. p. 95.

Annual. Stem erect, simple, or scarcely branched, smoothish, or sometimes clothed with short loose pubescence, from 4 inches to a foot in height. *Leaves* opposite, with short footstalks, the upper ones alternate, oblongly elliptic, bluntish, denticulate, old ones smoothish, glossy; young ones clothed with a short tomentum, and fascicles of short starry hairs, nerve underneath pinnately branched: upper side of a bright green, underneath paler, margins clothed with little fascicles of short hairs, which are seated on minute tubercles, or small teeth. *Petioles* clothed with little tufts of hairs. *Stipules* large, leaf-like, lanceolately linear, taper-pointed,



HELIANTHEMUM ledifolium.

Ledum-leaved Sun-Rose.

Sect. V. BRACHYPETALUM. *Calyx* 5-sepalus, sepalis externis minutis, internis trinerviis acuminatis. *Petala* lutea, interdum basi maculata, parva, sæpè calyce breviora. *Stamina* pauca 10-20, ovarium cingentia. *Stylus* rectus et erectus apice incrassatus. *Stigma* simplex. *Ovarium* triquetrum, angulis sæpè pilosis. *Capsula* triquetra, subnitida. *Semina* numerosa, minuta, pallida, angulosa.—Herbæ annuæ. Folia stipulata, petiolata, penninervia, subdenticulata, opposita, floralia alterna. Stipulæ oblongo-lineares, superiores longiores. Pedunculi uniflori, breves, solitarii, rarè axillares, sæpiùs oppositifolii vel oppositibractei, suberecti, horizontales vel retrofracti. DC. prodr. 1. p. 271.

* *Pedunculis suberectis foliis brevioribus, sepalis internis trinerviis.*

H. ledifolium, caule herbaceo, ramis pubescentibus erectis vel ascendentibus, foliis oppositis breviter petiolatis oblongo-ellipticis subdenticulatis glabriusculis junioribus stellato-pubescentibus; superioribus alternis floribus oppositis, omnibus stipulatis, pedunculis erectis et calycibus acuminatis pubescentibus, capsulis magnis glabris.

Helianthemum ledifolium. DC. prodr. 1. p. 272. Spreng. syst. v. 2. p. 589. n. 34. Pers. syn. 2. p. 7. Swt. hort. brit. p. 35. n. 26.

Cistus ledifolius. Linn. spec. 742. Smith Engl. bot. 2414. Comp. fl. brit. ed. 4. p. 95.

Annual. Stem erect, simple, or scarcely branched, smoothish, or sometimes clothed with short loose pubescence, from 4 inches to a foot in height. *Leaves* opposite, with short footstalks, the upper ones alternate, oblongly elliptic, bluntish, denticulate, old ones smoothish, glossy; young ones clothed with a short tomentum, and fascicles of short starry hairs, nerve underneath pinnately branched: upper side of a bright green, underneath paler, margins clothed with little fascicles of short hairs, which are seated on minute tubercles, or small teeth. *Petioles* clothed with little tufts of hairs. *Stipules* large, leaf-like, lanceolately linear, taper-pointed,

also clothed with little tufts of woolly hairs, and more than double the length of the footstalks. *Peduncles* erect, shorter than the calyx, thickly clothed with a dense pubescence, and little tufts of short hairs intermixed. *Calyx* of 5 sepals, clothed with a short tomentum: the two outer sepals small, linear, taper-pointed, and keeled: three inner ones ovate, taper-pointed, three-nerved, remaining persistent, and spreading when in fruit. *Petals* 5, about the length of the calyx, oblongly ovate, distinctly spreading, of a pale sulphur colour, with a bright orange-coloured spot near the base of each. *Stamens* about 20: *filaments* light yellow, smooth, unequal in length. *Germen* triquetrous, the angles hairy. *Style* erect, thickening upwards, about the length of the stamens, terminated by a small slightly 3-lobed *Stigma*. *Capsule* acutely 3-sided, glossy, the angles clothed with short hairs. *Seeds* small, numerous, pointed at one end, angular, pitted, of a dark brown colour.

The present curious species is an annual plant, and is a native of England, as well as other different parts of Europe; in this country it is but rarely met with, and chiefly about Brent Down, in Somersetshire, where *H. polifolium* is also abundant; for seeds of which, we are much obliged to Mr. Thomas Clark, jun. of Bridgewater, who was so kind as to send us some.

Our drawing of the present species was taken from plants raised in our garden from seeds given us by H. B. Ker, Esq.; it is readily distinguished from all others with which we are acquainted, by its very large glossy capsule: our plants were raised from seeds sown early in Spring, those flowered the end of May and in June, and soon ripened their seeds, some of which we sowed again as soon as ripe, those flowered in Autumn and through the Winter, until the frost destroyed them: the seeds only require to be sown in the open ground, and to be kept free from weeds.





HELIANTHEMUM salicifolium.

Willow-leaved annual Sun-Rose.

Sect. V. BRACHYPETALUM. *Supra fol. 41.*

** *Pedunculis horizontalibus foliis seu bracteis longioribus, floribus erectis; sepalis internis trinerviis.*

H. salicifolium, caule ramoso, ramis erectis vel adscendentibus sub-hirsutis, foliis breviter petiolatis obovato-oblongis acutiusculis denticulatis subtomentosis suprà virescentibus, stipulis lineari-oblongis superioribus folio dimidiò brevioribus, pedunculis calycibusque hirsutis suboppositibracteis, bracteis ovatis acuminatis sessilibus integris. *DC. prodr. 1. p. 273.*

Helianthemum salicifolium. *Pers. syn. 2. p. 78. Willd. enum. 1. p. 571. Link enum. 2. p. 75. Spreng. syst. 2. p. 589.*

Cistus salicifolius. *Linn. spec. 742. Willden. sp. pl. 2. p. 1200. Hort. Kew. ed. 2. v. 3. p. 310. Flor. græc. t.*

Annual, from a span to 9 inches in height, more or less branched; *branches* upright or ascending, more or less hairy. *Leaves* on short petioles, obovately oblong, bluntish or scarcely acute, clothed with a short down, the margins fringed with fascicles of slender white hairs, which are seated on little tubercles that gives the appearance of small teeth, the upper side pale green; underneath paler and strongly nerved: lower ones opposite, broadest, and bluntest; the upper ones alternate, narrower, and more acute. *Petioles* hairy. *Stipules* linearly oblong or lanceolate, acute, the upper ones broadest and longest, also clothed with stellate fascicles of hairs. *Flowers* small, yellow, in a sort of terminal raceme. *Pedicles* generally opposite to a leaf or bracte, horizontal or ascending, densely hairy, thickening upwards. *Bractes* sessile, ovate, acuminate, also thickly clothed with bunches of hairs seated on minute

tubercles. *Calyx* of 5 sepals, thickly clothed with long slender white hairs; the two outer ones small, lanceolate, acute; 3 inner ones ovate, taper-pointed, strongly 3-nerved, concave. *Petals* 5, slightly imbricate at the base, yellow. *Stamens* 12 to 18. *Germen* three-sided, smooth, the angles hairy. *Style* short, erect, very slender at the base, and much thickened upwards. *Stigma* headed, fimbriate. *Capsule* 3-celled, many-seeded.

This pretty little annual plant is a native of Spain, Italy, and other countries in the South of Europe. It only requires to be sown in the open borders of the Flower Garden, and to be kept free from weeds; the seeds should be sown in March, or the beginning of April; the plants will then flower abundantly, and ripen plenty of seeds.

Our drawing was made at the Apothecaries' Company's Garden, at Chelsea, last Summer.





HELIANTHEMUM ellipticum.

Elliptic-leaved Sun-Rose.

Sect. VI. ERIOCARPUM. *Calyx* 5-sepalus, sepalis extùs piloso-sericeis seu tomentosiusculis intùs nitidis, 2 externis minutis linearibus, 3 internis ovatis 4-5-striatis. *Petala* calyce paulò longiora. *Stylus* subrectus basi flexus. *Ovarium* pilosum seu villosum. *Cap-sula* pilosa. *Semina* numerosa, rufescentia, minima.—Suffrutices; *rami teretes, juniores cinereo-pubescentes*. *Folia opposita alternaque, subtùs cano-cinerea obtusiuscula*. *Stipulæ petiolo breviores lineares*. *Racemi secundi parvi oppositifolii, floribus confertis parvulis sessilibus seu majoribus breviter pedicellatis*. DC. prodr. 1. p. 273.

H. ellipticum, caule suffruticoso ramoso erecto cinereo, foliis oppositis ellipticis leproso-tomentosis cinereo-candidis obtusis margine revolutis, stipulis linearibus parvis, racemis paucifloris, floribus sessilibus bracteis subalternis. DC. prodr. v. 1. p. 274.

Helianthemum ellipticum. Pers. syn. 2. p. 78. Spreng. syst. v. 2. p. 589. Swt. hort. brit. ed. 2. p. 42. n. 39.

Cistus ellipticus. Desf. fl. atl. 1. p. 418. t. 107. Smith flor. græc. t. 502.

Stem suffrutescent, producing numerous branches from the base, which at first spread out a little, but afterwards become erect: *branches* thickly clothed with canescent hairs. *Leaves* opposite, elliptic, obtuse, the upper ones sometimes alternate, densely clothed with white woolly hairs, margin slightly revolute, attenuated a little towards the base, sessile, or on very short footstalks. *Stipules* very small, linear, very hairy, spreading. *Racemes* several-flowered, secund. *Flowers* sessile, or the lower ones on very short footstalks, all facing one way, pale yellow or straw-coloured. *Peduncles* densely clothed with woolly hairs. *Bractes* generally alternate with the flowers, deciduous. *Pedicles* very short, and only on the lower flowers. *Calyx* of 5 sepals, large, in-

flated, very hairy : two outer sepals very small, spreading, and clothed with spreading hairs : inner ones broadly ovate, three to five-nerved, glossy, the nerves pale red, hollow on the inside. *Petals* 5, imbricate, rounded, pale yellow or straw-colour, spreading flat when expanded. *Stamens* from 8 to 10, surrounding the Style: *filaments* yellow: *pollen* orange-coloured. *Ger-men* hairy. *Style* a little twisted at the base, then becoming erect. *Stigma* capitate, papillose.

This pretty little species is a native of Barbary, Egypt, and the Levant, and is therefore rather tender, requiring to be kept in frames, or in the Greenhouse, in severe frosty weather ; or if planted in rock-work, a common garden-pot placed close over it, with the hole at the bottom close stopped, will protect it very well ; we find this method succeed with many plants that are tender, such as the herbaceous plants from Mexico, Chili, Peru, The Cape of Good Hope, New South Wales, the Levant, and the Canary Islands ; and numerous rather tender plants that would otherwise be killed, are preserved in good health, by that means ; the best soil for the present species is a mixture of light sandy loam and peat ; and some plants of it should be grown in pots, and preserved in frames or in the Greenhouse, in Winter, or in the window of a light room ; young cuttings, planted under hand-glasses in Summer, in a shady situation, will root freely ; it also produces an abundance of seeds, by which young plants may be readily raised.

Our drawing was made from a plant in the Garden belonging to the Apothecaries' Company, at Chelsea, where it was raised from seeds by Mr. W. Anderson.





HELIANTHEMUM *Fumana*.

Heath-like Sun-Rose.

Sect. VII. FUMANA. *Calyx* antè anthesin apice tortus 5-sepalus, sepalis externis angustis parvulis, internis 3 ovato-acuminatus 4-5-venosis margine scariosis. *Petala* lutea parva calyce subduplò longiora. *Stamina* pauca. *Stylus* rectus staminibus sublongior, per anthesin obliquus, post anthesin suberectus. *Stigma* capitatum, fimbriatum, sub 3-lobum. *Capsula* 3-valvis, aperta patula; semina nigrescentia vel rufescentia angulosa pauca.—*Caules suffruticosi*. Folia linearia sessilia aut subsessilia, angusta. Pedicelli uniflori, ante anthesin cernui, per anthesin erecti, post anthesin reflexi.

* *Foliis alternis exstipulatis.*

H. Fumana, caule suffruticoso ramoso tortuoso subdiffuso erectiusculo; ramis inferioribus procumbentibus, foliis alternis linearibus margine pilosis scabriusculis subinvolutis: inferioribus brevibus confertis; superioribus sparsis longioribus, pedunculis solitariis unifloris raro ramealibus sæpiùs suboppositifoliis terminalibusve folio longioribus, capsulis apertis nudis. *DC. prodr.* 1: p. 274.

Helianthemum Fumana. *Mill. dict.* n. 6. *Swt. hort. brit.* p. 35. n. 35. *Cistus Fumana*. *Linn. spec.* 740. *Desf. fl. atl.* 1. p. 414. t. 105.

Stem suffruticose, much branched, more or less twisted, spreading or nearly erect: *lower branches* procumbent, or horizontally spreading: *upper ones* erect or ascending, thickly clothed with short downy hairs. *Leaves* alternate, linear, fleshy, bluntish, the margins roughish, thinly hairy, slightly curved inwards: lower ones very short and crowded; upper ones much longer and more scattered. *Stipules* and *Bractes* none. *Peduncle* solitary, 1-flowered, either terminal, or opposite to a leaf by the side of the branch, longer than the leaf, densely clothed with short woolly hairs, and a few longer ones intermixed, erect before flowering and when in bloom, afterwards reflexed. *Calyx* of 5 sepals,

thickly clothed with short hairs, and some longer ones intermixed, twisted at the point before expansion; 2 outer sepals oblong, obtuse, scarcely half the length of the inner ones; inner ones ovate, concave, tapering at the point, strongly 4-nerved, the margins scariose and membranaceous. *Petals* 5, roundly ovate, slightly imbricate at the base, the points distinct and spreading, of a bright yellow colour. *Stamens* about 16 bearing anthers, besides several sterile ones: *filaments* smooth, pale yellow, the sterile ones rather shortest and spreading: *pollen* bright yellow. *Germen* smooth and glossy. *Style* a little bent at the base, thickening upwards, about the length of the stamens. *Stigma* capitate, slightly 3-lobed, fimbriate.

This curious little plant is a native of the South of Europe, and is a very proper subject for the ornamenting of rock-work, but it should be planted on the south side, as it is rather tender, and if the Winter prove severe, it will need a little covering; it also makes a pretty appearance when grown in small pots, and it can then be protected in a frame in severe weather, but it must be exposed to the air as much as possible in fine weather, as it is very apt to get damp and mouldy if shut up too close. It succeeds well in an equal mixture of sandy loam and peat, and is readily raised from seeds, which ripen in abundance.

The present plant is often confused with *H. procumbens*, but is readily distinguished when both are growing together; plants of that species were shown us by Mr. Anderson, of the Chelsea Botanic Garden, but they did not flower last Summer. Our drawing was taken at the Nursery of Mr. Colvill, in July last.



Walden 164

Pub. by J. R. Gregory, March 1863.

J. Hart Del.

HELIANTHEMUM procumbens.

Procumbent Sun-Rose.

Sect. VII. FUMANA. *Supra fol. 16:—* Foliis alternis exstipulatis.*

H. procumbens, caule suffruticoso procumbente ramoso, ramis elongatis junioribus canescentibus, foliis alternis linearibus sublaeis margine et subtus pilosis: pilis strigosis, pedunculis subaxillari- bus folio brevioribus, capsulis apertis semina gerentibus. *Dunal ined. in DC. prodr. 1. p. 275.*

Helianthemum procumbens. *Spreng. syst. 2. p. 590. Swt. hort. brit. p. 35.—Barrel. ic. t. 445.*

Cistus humilis sive *chamæcistus ericæ* folio humilior. *Magn. bot. p. 69.*

Stem suffruticose, procumbent, clothed with a brown glossy bark, much branched; *branches* elongated, procumbent, canescent when young, and thickly clothed with short white down. *Leaves* alternate, linear, loosely spreading, rather succulent, scarcely acute, the points slightly curved inwards, margins and underside clothed with short strigose hairs. *Stipules* and *Bractes* none. *Peduncle* short, axillary, solitary, purplish, slightly pubescent, erect when in bud, and when the flower is expanded, afterwards reflexed. *Calyx* of 5 sepals, twisted at the point before expansion, 2 outer ones narrow, linear, acute, more than half the length of the inner ones, which are ovate, concave, taper-pointed, 3 or 4-nerved, the nerves purplish, tubercled, and clothed with very short hairs. *Petals* 5, broadly obovate, imbricate, of a bright yellow. *Stamens* about 20 bearing anthers, besides a few sterile ones: *filaments* smooth, pale yellow. *Germen* glossy, slightly pubescent. *Style* smooth, a little bent at the base, thickening upwards. *Stigma* capitate, fimbriate, slightly 3-lobed.

This pretty little plant is nearly related to *H. Fumana*, but is readily distinguished by its more procumbent habit, more loosely spreading leaves, and particularly by its seeds, which remain several days in the capsule after it is burst, whereas in *H. Fumana* they spring out immediately as soon as the capsules open, so that it is very difficult to procure them, except by gathering them before they are quite ripe.

Our drawing was made from a plant in the fine collection belonging to the Apothecaries' Company, at Chelsea, where it was raised from seed by Mr. W. Anderson; it is a native of the South of France, Italy, and Tauria, according to M. Decandolle; and we find it much hardier than *H. Fumana*, thriving well in a light sandy soil, or a mixture of light turfy loam, peat, and sand, will suit it very well. It makes a pretty plant mixed with others, for adorning rock-work, but will require a little covering in severe frosty weather; or it may be grown in small pots, and can then be protected in frames or in the Greenhouse, in Winter. Seeds of it ripen plentifully, by which it might be readily increased; or cuttings, planted under hand-glasses, will soon strike root.



HELIANTHEMUM arabicum.

Arabian Sun-Rose.

Sect. VII. FUMANA. *Supra fol. 16.*

** *Foliis alternis stipulatis.*

H. arabicum, caule suffruticoso hirsuto adscendente, ramis virgatis, foliis alternis lineari-oblongis hirsutis subsessilibus, pedunculis solitariis unifloris suboppositifoliis ramealibus terminalibusve, calycibus hirsutis. *DC. prodr. 1. p. 275.*

Helianthemum arabicum. *Pers. synops. 2. p. 80. n. 80. Spreng. syst. 2. p. 591. n. 61.*

Cistus arabicus. *Linn. spec. 745. Willd. spec. pl. 2. p. 1211. n. 79.*

Vahl. symb. 2. p. 62. t. 35. Sibthorp Flor. græc. t. 503.

Cistus ferrugineus. *Lamarck dict. 2. p. 25.*

Suffrutescent, very much branched: *branches* slender, hairy, ascending, growing in a close compact tuft. *Leaves* alternate, linearly oblong, taper-pointed, attenuated to the base, nearly sessile, hairy. *Petioles* very short, or scarcely any. *Stipules* ovate, taper-pointed, hairy, and fringed. *Peduncles* solitary, opposite to a leaf, or terminating the branches, twice the length of the calyx, slender, and clothed with short hairs. *Flowers* saffron-coloured, more or less tinged with purple at the back and margins. *Calyx* of 5 sepals, thickly clothed with short hairs; the two outer ones smallest, lanceolate, broadest towards the base, taper-pointed, spreading, or the points sometimes reflexed: inner ones ovate, acute, concave inwards, 2 or 3-nerved. *Petals* 5, broadly obovate, terminating in a sort of point, very much imbricate at the margins. *Stamens* numerous: *filaments* smooth, yellow, unequal in length. *Germen* pubescent. *Style* smooth, longer than the stamens. *Stigma* small, capitate, papil-

lose. *Capsule* large, pubescent, three-celled, and many seeded.

The present handsome and very distinct species is a native of Barbary, Arabia, Greece, and the South of Europe, and is therefore rather tender, requiring the protection of a frame or Greenhouse in Winter; or if grown by the side of a wall, or in rock-work, it will need some sort of covering in severe frosty weather; but it is much better to preserve some plants of it in pots in the Greenhouse or frames through the Winter, keeping them in an airy situation, and exposing them as much as possible in mild weather, that they may not be drawn up weak; they can then be turned out in the Spring, and be planted in rock-work, or in a warm border, where they will produce their lively flowers in succession for a considerable time; young cuttings, planted under hand-glasses in Spring or Summer, will strike root readily.



HELIANTHEMUM lævipes.*Cluster-leaved Sun-Rose.*Sect. VII. FUMANA. *Supra*, fol. 16.**** Foliis alternis stipulatis.**

H. lævipes, caule fruticoso ramosissimo adscendente; ramis gracilibus patentibus, foliis stipulatis setaceis glaucis subglabris, gemmis foliaceis axillaribus, stipulis filiformibus longis, pedunculis longis racemosis secundis, pedicellis glabris basi bracteatis, calycibus hirsutis, petalis obovatis distinctis.

Helianthemum lævipes. DC. *prodr.* 1. p. 275. Willd. *enum.* 570. Pers. *syn.* 2. p. 76. Swt. *hort. brit.* p. 35. n. 37. Spreng. *syst. veg.* 2. p. 591.

Cistus lævipes. Linn. *sp. pl.* 739. Willden. *sp. pl.* 2. p. 1190. Jacq. *hort. vind.* 2. p. 74. t. 158. Botan. *magaz.* 1782.—Ger. *galloprov.* p. 394. n. 6. t. 14.

Stem shrubby, very much branched, ascending: branches very slender, rigid and easily broken. *Leaves* alternate, stipulate, bristle-shaped, nearly cylindrical, obtuse, with a short sharp point, succulent, of a very blue glaucous colour. *Stipules* subulate, acute, not half the length of the leaves: in the axil of each large leaf is a tuft of smaller ones, which belongs to a young shoot, but many of which never come to perfection. *Peduncles* terminal, racemose, often paniced, villosely hairy, at first nodding, but as the flowers expand, considerably lengthened and becoming straight. *Bractes* at the base of the pedicles, and alternating with them, obtuse, broadish at the base, the lowermost largest and gradually decreasing upwards. *Pedicles* quite smooth, purplish, all leaning to one side, nodding before the flowers expand, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, a little twisted before opening; 2 outer ones roundly oblong, blunt, hairy, and fringed: inner ones ovate, scarcely acute, concave, strongly 4-nerved, with scariose membranaceous margins, very hairy. *Corolla*

of 5 petals, distinct or scarcely imbricate, roundly obovate or obcordate, slightly concave, more or less crenulate, of a bright pale yellow. *Stamens* numerous, about the length of the style, scarcely half of them bearing anthers: *filaments* slender, pale yellow, more or less twisted, about 20 bearing anthers, sterile ones surrounding the fertile ones, slender and more twisted, having the appearance of fringe: *pollen* pale yellow. *Germen* smooth. *Style* a little bent at the base, scarcely thickening upwards. *Stigma* small, capitate, slightly 3-lobed, fimbriate.

This elegant little plant is a native of the South of Europe, and requires the protection of a Greenhouse in Winter; but the more airy the situation is, in which it is grown, the better it will thrive, as it is liable to damp and lose its leaves if grown in too close a situation, or crowded amongst other plants; its flowers are produced from June to August, according to the situation in which it is kept; they are of short duration, as the stamens so soon come in contact with the stigma, which fertilizes the capsule, and the petals are thrown off immediately; but this may be prevented in part, by taking off the anthers before they burst, the petals then remain on much longer; the same rule is applicable to all other flowers, many of which may be preserved for days or even weeks longer, by divesting them of their anthers, and keeping them in a close house where no insects can bring pollen to them; we have known this circumstance for years, but we do not know that it has ever been published; we first observed it when we were attaching the pollen of the different species of *Pelargonium* to the stigmas, the petals were almost immediately thrown off, whereas others of the same sorts remained in flower many days, in a house that was kept shut up from the insects, and where the pollen was not applied to the stigmas.

The present little plant succeeds well in a mixture of sandy loam and peat, and is readily increased by seeds, which should be sown early in Spring; or by cuttings, which strike root freely under hand-glasses. Drawn at the Nursery of Mr. Colvill, last Summer.



Widd. 22. 18

Pub. by J. Ridgway. Sep. 27. 1829.

J. Hart. Del.

HELIANTHEMUM thymifolium.

Thyme-leaved Sun-Rose.

Sect. II. FUMANA. *Supra fol. 16.*

*** *Foliis oppositis alternisque stipulatis.*

H. thymifolium, caule suffruticoso procumbente, ramis pubescentibus, foliis sublinearibus brevissimis pubescentibus oppositis summis alternis, stipulis mucronatis erectis, pedunculis villosulo-glutinosus paucifloris. *DC. prodr. 2. p. 276.*

Helianthemum thymifolium. *Pers. syn. 2. p. 79. Spreng. syst. 2. p. 591.*

Cistus thymifolius. *Linn. spec. 743. Willden. sp. pl. 2. p. 1206. Hort. Kew. ed. 2. v. 3. p. 312. Flor. græc. t. 500.—Barrel. ic. t. 444.*

A pretty little dwarf suffrutescent plant. *Stems* numerous, procumbent, the points ascending, densely pubescent, or clothed with short hairs. *Leaves* crowded, opposite, linearly oblong, scarcely acute, very short, thickly clothed with a roughish pubescence; the young shoots produced in the axils of the leaves give the appearance of the leaves being tufted: upper leaves sometimes alternate. *Stipules* short, erect, mucronate. *Racemes* terminal, few-flowered, nodding before the flowers expansion, becoming erect as they expand. *Peduncles* and *pedicles* villosely hairy, somewhat glutinous. *Bractes* short, very hairy. *Pedicles* drooping before the flowers expansion, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, clothed with a short clammy pubescence; the 2 outer ones very small and narrow, spreading or somewhat reflexed, inner ones broadly ovate, concave, short and inflated, acute. *Petals* 5, bright yellow, obovate, somewhat crumpled, imbricate over

each other near the base. *Stamens* from 20 to 30 : *filaments* pale yellow. *Germen* smooth, 3-sided. *Style* straight, smooth, a little longer than the stamens. *Stigma* capitate, slightly 3-lobed, fimbriate.

This neat little species is a native of the South of Europe and the Levant ; it is an old inhabitant of our gardens, in which it is sometimes in great abundance ; but is again frequently lost, as it is very apt to rot off in Winter with too much moisture, as well as from severe frost ; it is therefore best to keep some plants of it in pots, to be preserved in frames or in the Greenhouse in frosty or very wet weather, exposing it as much as possible when the weather is dry and mild ; although its flowers are not so showy as some other species, its very distinct habit and character make it well worth the notice of cultivators, particularly as it belongs to a tribe of the genus that produces but few species : the best soil to grow it in is a sandy peat, mixed with a little loam, and the pots to be well drained with potsherds, that the wet may pass off freely : young cuttings, planted under hand-glasses, in a light sandy soil, in Spring or Autumn, will soon strike root ; it may also be raised from seeds, which are ripened in abundance ; plants of it make a pretty appearance in Summer when planted out in rock-work, but they will seldom survive the Winter in such situations, without being well attended to, and covered up in severe weather, and to be exposed as much as possible when the weather is mild.





HELIANTHEMUM glutinosum.

Clammy Sun-Rose.

Sect. VII. FUMANA. *Supra fol. 16.*

*** *Foliis oppositis alternisque stipulatis.*

H. glutinosum, caule suffruticoso adscendente, ramis villosoglutinosus subcinereis, foliis sublinearibus margine revolutis villosoglutinosus subcinereis oppositis; summis alternis, stipulis inferioribus minutis: ceteris longis laxiusculis, pedunculis calycibusque villosoglutinosus. *DC. prodr. 1. p. 276.*

Helianthemum glutinosum: *Pers. syn. 2. p. 79. Willd. enum. supp. p. 39. Link enum. h. ber. 2. p. 76. Spreng. syst. 2. p. 591. Swt. hort. brit. p. 35.*

Cistus glutinosus. *Linn. sp. pl. 2. p. 1206. Mant. 246. Willden. sp. pl. 2. p. 1206. Cavan. ic. 2. p. 36. t. 145. f. 2. Hort. Kew. edit. 2. p. 311.*

Stem suffruticose, slender, erect or ascending, clothed with a brown bark that scales off, much branched: *branches* slender, erect or ascending, thickly clothed with short villous hairs, that are more or less viscous, giving a grey or hoary appearance. *Leaves* opposite on the lower part of the stem, the upper ones alternate, linear or sometimes lanceolately linear, revolute at the margins, thickly clothed with short viscous hairs, of a dark green colour, but they appear rather hoary from the hairs with which they are covered, upper ones shorter and blunter. *Petioles* very short. *Stipules* on the lower leaves small, subulate, fleshy, pubescent: on the upper ones longer and larger, spreading, and bluntish, villous. *Flowers* axillary, solitary, terminating the branches in a sort of raceme, that is at first a little nodding, but as the flowers expand, it becomes upright. *Pedicels* villosely viscous. *Calyx* of 5 sepals, clothed with short

viscous hairs; the two outer ones very small, oblong, bluntish: inner ones ovate, concave, strongly veined, scarcely acute. *Petals* 5, small, a little longer than the calyx, obovate, distinctly spreading, pale yellow, sometimes with an orange or golden crescent shaped spot a little above the base. *Stamens* several: *filaments* smooth, pale yellow. *Germen* glossy, 3-sided. *Style* straight, smooth. *Stigma* capitate, fimbriate, slightly 3-lobed.

The present very distinct species is a native of Spain, and the South of France, and requires a little protection in Winter, either to be placed in a frame or the Greenhouse in frosty weather; its flowers are very fugacious, as the petals stay on but a few hours in the morning, and are always fallen before the middle of the day, but the flowers are produced in succession nearly all the Summer and till late in Autumn; it also ripens abundance of seeds; the best soil to grow it in is an equal portion of sandy loam and peat; and if grown in rock-work, it will require a little covering in Winter. Cuttings of it, planted in pots, or under hand-glasses, in July or August, will soon strike root.

Our drawing was made from a plant sent us by A. B. Lambert, Esq. from his choice collection at Boyton House, Wilts, where it was raised from seed received from Spain.





J Hart Del.

Pub. by J Bridgway. Jan. 1823.

Weddell Sea.

HELIANTHEMUM celandicum.

Pale green-leaved Sun-Rose.

Sect. VIII. PSEUDOCISTUS. *Supra fol. 2.*

H. celandicum, caule suffruticoso procumbente ramoso, foliis lanceolato-ellipticis obtusiusculis utrinquè viridibus sæpè glabris interdum ciliatis petiolatis; summis sessilibus, racemis simplicibus paucifloris, calycibus subgloboso-ovatis. *DC. prodr. 1. p. 276.*

Helianthemum celandicum. DC. flor. fr. 4. p. 817. Swt. hort. brit. p. 35. n. 45.

Cistus celandicus. Linn. sp. 741.

Chamæcistus 2. Clus. hist. p. 73. ic.

Stem suffrutescent, branching, procumbent, or laying flat on the ground, the young branches hairy. *Leaves* pale green on both sides, lanceolately elliptic, bluntish, others lanceolate and acute, hairy when young, but becoming smooth by age, the margins fringed; lower ones petiolate, the upper ones near the flowers sessile. *Petioles* slender, hairy. *Stipules* none. *Racemes* terminal, simple, few-flowered. *Bractes* small, sessile, hairy and fringed, acute. *Pedicles* slender, very hairy, tinged with purple. *Calyx* of a roundish oval, consisting of 5 sepals, hairy: 2 outer sepals very small, spreading: inner ones ovate, concave inwards, scarcely acute. *Petals* 5, pale yellow, distinct, spreading, about the length of, or scarcely longer than the sepals, obovate, rounded at the points. *Stamens* numerous, unequal in length, spreading: *filaments* yellow: *pollen* orange-coloured. *Germen* hairy. *Style* short, twisted at the base. *Stigma* capitate, slightly 3-lobed, papillose.

Our drawing of this pretty little species was made from a plant in the Apothecaries' Company's Garden

at Chelsea, several plants of it having been raised by Mr. W. Anderson, from seeds that he received from Germany; it is nearly related to *H. alpestre*, but is sufficiently distinguished by its weaker growth, much narrower leaves, and smaller flowers, the petals of which are distinct, and not imbricate as in *H. alpestre*. It is a very pretty plant for the ornamenting of rock-work, taking up but little room, so that it requires to be planted in a conspicuous situation; it also does very well, and makes a pretty appearance, when cultivated in small pots, requiring a light sandy soil; young cuttings of it, planted under hand-glasses, strike root readily; it may also be increased by seeds, which should be sown the beginning of April, and as soon as up, be pricked off in small pots, and as they increase in size to be shifted into larger ones, they will then make fine plants the first season.



R. edulis

Pub. by J. E. & W. G. July 1868.

J. Hart del.

HELIANTHEMUM pulchellum.

Neat Sun-Rose.

Sect. VIII. PSEUDOCISTUS. *Supra fol. 2.*

H. pulchellum, caule suffruticoso procumbente ramoso: ramis tomentoso-incanis, foliis rotundatis ovatisve obtusis supra viridibus piloso-hispidis scabris: subtus tomentoso-incanis margine parum, revolutis, racemis simplicibus, calycibus pilosis canescentibus, petalis imbricatis.

Helianthemum alpestre. Spreng. syst. 2. p. 590. nec aliorum.

A small trailing suffruticose plant; *branches* short, spreading in all directions, the points ascending, tinged with purple, the upper part clothed with a short white thin tomentum, which wears off as they become older. *Leaves* nearly round, or the upper ones ovate, the margins slightly revolute; lower ones very small, green, and dotted with little rough dots on the upper side, and covered with stiffish white hairs, underneath clothed with a dense white tomentum. *Petioles* short and flat, fringed with long hairs. *Racemes* terminal, simple, several-flowered, nodding before the flowers expansion, afterwards erect. *Bractes* lanceolate, acute, broad at the base, very hairy. *Pedicles* slender, clothed with a short white thin tomentum, and a few longer hairs intermixed, nodding before the flowers expand, and erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, clothed with long bristly hairs, which give it a white appearance; 2 outer sepals very small, lanceolate, bluntish; inner ones ovate, obtuse, concave, strongly nerved. *Petals* 5, broadly obcordate, imbricate, slightly crenulate, of a bright pale yellow. *Stamens* from 40 to 50, the filaments and anthers yellow. *Ova-*

rium pubescent. *Style* short, twisted. *Stigma* very large, capitate, fimbriate.

From Sprengel's description, we believe the present to be the plant he intends for *H. alpestre*, but certainly not the one described by Decandolle, which we have already published, and the leaves of which are green on both sides; the present is a stiffer shorter plant, with much stiffer and rounder leaves, which are of a snowy whiteness on the lower side. It is certainly a very pretty plant when covered with its numerous flowers, and is a very proper subject for adorning rock-work, or for growing in a small pot; it is quite hardy, as we see several nice plants of it thriving well in Mr. Colvill's Nursery at Roehampton, that had stood two years in the open border without any protection. It succeeds well in a light sandy soil, or an equal mixture of light sandy loam and peat will suit it very well; young cuttings, planted under hand-glasses, in Autumn, strike root readily.

Our drawing was made last Summer, from a plant in the collection of Mr. Colvill, at his Nursery in the King's-road, Chelsea.



HELIANTHEMUM alpestre.

Alpine Sun-Rose.

HELIANTHEMUM. *Calyx* 3-sepalus, sepalis æqualibus, vel 5-sepalus, sepalis duplici serie dispositis, 2 externis sæpè minoribus, rarò majoribus. *Petala* 5 sæpè apice irregulariter denticulata. *Stigma* capitatum. *Stylus* nunc subnullus, nunc rectus, nunc obliquus, nunc basi flexus. *Ovarium* triquetrum. *Capsula* 3-valvis, valvis medio septi aut seminiferis. *Semina* angulata, glabra. *Albumen* farinosum. *Embryo* uncinato-inflexus (in *Hel. vulgare* Gärtn. 1. p. 371. t. 76. f. 11.)—Herbæ, suffrutices, frutices. *Folia opposita alternaque, exstipulata vel stipulata, trinervia vel penninervia. Pedicelli sæpissimè basi bracteati, interdum oppositibractei seu oppositifolii, nunc solitarii, nunc umbellati, nunc racemosi, racemis secundis, nunc corymbosi, nunc paniculati.*

Genus divisum in series tres nempè.

1^a. *Stylo recto erecto subnullo aut staminibus brevior, stigmate capitato.*—Sect. 1-3. **HALIMIUM. LECHEOIDES. TUBERARIA.**

2^a. *Stylo recto erecto staminibus æquali aut longiora.* Sect. 4-5. **MACULARIA. BRACHYPETALUM.**

3^a. *Stylo basi inflexo.* Sect. 6-9. **ERIOCARPUM. FUMANA. PSEUDOCISTUS. EUHELIANTHEMUM. DC. prodr. 1. p. 266-267.**

Sect. VIII. **PSEUDOCISTUS.** *Calyx* 5-sepalus, sepalis externis angustis minutis, internis 4-veniiis. *Petala* lutea, parva, calyce vix duplò longiora. *Stylus* basi contortus retroflexus apice inflexus, staminibus sæpè brevior, rarò longior. *Stigma* capitatum, trilobum. *Capsula* parvæ. *Semina* pauca, subrufescentia.—Herbæ perennes aut suffrutices. *Folia petiolata, penninervia, opposita, exstipulata, rarò stipulata in summitate ramorum. Flores secundi, racemosi seu paniculati. Pedicelli basi bracteati, bracteis sessilibus lineari-lanceolatis, ante anthesin recurvi, per anthesin erecti, post anthesin reflexi.* DC. p. 276.

H. alpestre, caule suffruticoso procumbente ramoso: ramis piloso-hirsutis, foliis utrinquè subviridibus oblongo-ellipticis subglabris vel fasciculatim piloso hirsutis petiolatis: summis subsessilibus, pedicellis calycibusque piloso-hirsutis: pilis albido-cinereis, petalis imbricatis calyce duplo longioribus, staminibus 30-40 patentibus.

Helianthemum alpestre. DC. prodr. 1. p. 276.

Cistus alpestris. Crantz. aust. p. 103. t. 6. f. 1. *Wahlemb. helv.* p. 103. *Lodd. bot. cab.* 131.

Cistus oelandicus. Jacq. aust. t. 399.

Stem shrubby, procumbent, branching in all directions: *branches* thickly clothed with white spreading unequal hairs. *Leaves* green on both sides, oblong-elliptic, with a strong nerve underneath, and furrowed above, more or less hairy on both sides: lower ones petiolate; upper ones sessile, or nearly so, shorter and rounder. *Petioles* flat, fringed. *Stipules* none. *Flowers* terminal, in short secund racemes, of a bright yellow. *Bractes* at the base of the pedicles, oblong, or lanceolate, bluntish, densely hairy. *Pedicles* slender, thickly clothed with white unequal hairs; before flowering, recurved, when in flower, erect, after flowering, reflexed. *Calyx* of 5 unequal sepals, very hairy: 2 outer ones very small, lanceolate, scarcely more than half the length of the others; inner ones oblongly lanceolate, concave, bluntish. *Petals* 5, about double the length of the calyx; flat, imbricate nearly all their length, round or slightly emarginate, scarcely crenulate. *Stamens* 30 to 40, unequal in length, spreading. *Germen* hairy. *Style* short, twisted at the base. *Stigma* capitate, 3-lobed, bristly.

An elegant little species, well adapted for the ornamenting of rock-work, or for growing at the front of flower borders, where its lively blossoms, which continue in succession for a considerable time, make a handsome appearance. It is a native of various parts of Europe, growing in rocky mountainous situations; we have compared our plant with a fine specimen in Mr. Lambert's Herbarium, with which it agrees so exact, that the drawing might be supposed to have been made from the very specimen. It succeeds well in small pots, planted in a mixture of light sandy loam and peat; and cuttings strike root readily, taken off in the young wood as soon as ripened, and planted under hand-glasses, where they will soon strike root; it may also be raised from seeds, which sometimes ripen.

Our drawing was taken from a plant at the Nursery of Mr. Colvill, last summer.

77.



Weddell & Co.

Pub. by J. Rudolphson, Sep. 1828

J. Hunt Del.

HELIANTHEMUM vineale.

Slender-trailing Sun-Rose.

Sect. VIII. PSEUDOCISTUS. *Supra fol. 2.*

H. vineale, caule suffruticoso procumbente; ramis adscendentibus piloso-tomentosis canescentibus, foliis ovato-oblongis supra viridibus piloso-strigosis; subtus tomentoso-incanis, racemis simplicibus paucifloris calycibusque piloso-tomentosis canescentibus, petalis distinctis patentibus.

Helianthemum vineale. Pers. *syn.* 2. p. 77. DC. *prodr.* 1. p. 277.

Spreng. syst. 2. p. 590. *Swt. hort. brit.* p. 35.

Cistus vinealis. Willden. *sp. pl.* 2. p. 1195.

A trailing suffrutescent plant, very much branched: *branches* ascending, long and slender, clothed with a hoary tomentum, and some long hairs intermixed. *Leaves* opposite, ovate or oblong, bluntish, the lower ones broadest and roundest, the upper side green, but covered with white rigid hairs, underneath clothed with a dense white tomentum, other leaves on the same plant are green on both sides; after flowering, a great part of them become quite white; pennately nerved. *Petioles* flat, fringed, not so long as the leaves. *Racemes* terminal, few-flowered, nodding before the expansion of the flowers, afterwards erect. *Bractes* lanceolate, acute, very hairy and fringed, the points reflexed. *Pedicles* slender, very hairy and canescent, nodding before expansion, erect when in flower, and continuing so when in fruit. *Calyx* of 5 sepals, hispidly hairy, canescent, 2 outer sepals small, linear, fringed, 3 inner ones broadly ovate, concave, with red margins. *Petals* 5, distinct, spreading, longer than the sepals, yellow, narrow at the base and broad at the

points. *Stamens* about 40, spreading. *Ovarium* triangular, with thick margins, pubescent. *Style* twisted round. *Stigma* capitate. *Capsule* 3-celled, with two or three seeds in each cell.

A pretty trailing dwarf suffrutescent plant, the branches very slender, and extending to a good distance round, so that it is very desirable for ornamenting rock-work, as it is covered with flowers a great part of the Summer; after flowering, a great part of its leaves become quite white and silvery on both sides; and we are not acquainted with any species that varies so much in the colour of its leaves at various seasons. According to Decandolle, it is a native of Germany, Switzerland, France, and Spain, so that it is quite hardy, or only wants the least protection in severe frost, thriving well in a mixture of light sandy loam and peat, or any other light sandy soil, succeeding best in rock-work, or to be grown in small pots; for if planted in the open ground, it will be liable to suffer with too much moisture in Winter. Cuttings root readily, planted under hand-glasses, or it may be raised from seeds, which ripen plentifully.

Our drawing was made from plants, in the Garden belonging to the Apothecaries' Company, at Chelsea, where they were raised by Mr. Anderson from seeds received from Germany.



Waldst. &

Pub. by J. R. & J. W. J. 1827

M. Hort. 24.

HELIANTHEMUM canum.

Hoary Sun-Rose.

Sect. VIII. PSEUDOCISTUS. *Supra fol. 2.*

H. canum, caule suffruticoso procumbente ramoso, ramis adscendentibus piloso-tomentosis incanis, foliis obovatis ovatis ovato-oblongis vel ellipticis pilosis supra virescentibus subtus subtomentoso-canis, racemis simplicibus dichotomisve, pedicellis calycibusque piloso-canescenscentibus, petalis distinctis patentibus.

Helianthemum canum. Dunal in DC. prodr. 1. p. 277. Spreng. syst. 2. p. 590. Svt. hort. brit. p. 35.

Cistus canus. Linn. spec. 740. Jacq. aust. t. 277.

Chamæcistus 3. Clus. hist. p. 74. ic.

A pretty little trailing suffruticose plant: *branches* numerous, spreading round in all directions, short and slender, tinged with red, clothed with a short downy canescence, and some longish hairs intermixed. *Leaves* variable, obovate, ovate, oblongly ovate, elliptic or sometimes lanceolate, blunt, or the upper ones rather acute, clothed with bristle-like hairs on both sides, green on the upper side, but having a whitish appearance, from the hairs with which the leaves are covered, underneath clothed with a dense hoary tomentum, large ones three-nerved from the base, or pennately veined. *Petioles* flat, fringed, shorter than the leaves. *Racemes* terminal, simple or sometimes forked, several flowered, nodding before the flowers expansion. *Bractes* lanceolate, acute, fringed. *Pedicles* slender, hairy, nodding before the expansion of the flowers, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, densely clothed with white hairs; 2 outer sepals small, blunt; 3 inner ones roundly oval, short, concave, strongly nerved, about half the length of the petals, densely clothed with spreading white hairs. *Petals* 5, distinctly spreading, of a light

yellow, obovate, narrow at the base, entire or slightly notched. *Stamens* from 40 to 50, spreading. *Ovarium* triangular, with thick margins, hairy.

This neat little plant is quite hardy, and is a proper subject for the ornamenting of rock-work ; it also thrives and flowers well in a small pot, planted in a mixture of sandy loam and peat. It is nearly related to *H. alpestre*, already published, but nearer to *H. vineale*, and is sometimes mistaken for *H. marifolium*, but is very distinct from that species, which we only know by Barrelier's figure, and fine specimens preserved in Mr. Lambert's Herbarium ; and we do not believe that living plants of it are at present in this country, the present and some other species being generally mistaken for it. Cuttings root freely, planted under hand-glasses in Autumn ; it may also be raised from seeds, which ripen plentifully.

Our drawing was taken from plants at the Nursery of Mr. Colvill, last Summer.



HELIANTHEMUM croceum.

Saffron-coloured Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.—*Petalis luteis.*

H. croceum, caule fruticoso subprocumbente ramoso : ramis simplicibus erectiusculis tomentoso-canescens, foliis tomentosiusculis subdè canescentibus suprà glaucis margine revolutis : inferioribus suborbiculatis ; mediis ellipticis obtusis ; superioribus lanceolatis acutiusculis, stipulis bracteisque erectis lineari-oblongis villosis apice setosis subvirescentibus, calycibus glauco-flavescentibus minutè pubescentibus, petalis valde imbricatis.

Helianthemum croceum. DC. *prodr.* 1. p. 279. *Pers. syn.* 2. p. 79.

Swt. hort. sub. lond. p. 124. *Hort. brit.* 35. n. 56.

Cistus croceus. *Desf. fl. atl.* 1. p. 422. t. 110.

Stems shrubby, procumbent, or sometimes nearly upright, very rough and rugged : *branches* numerous, simple or rarely branched, erect or nearly so, when cultivated in a pot or in poor gravelly soil ; but in richer soil the branches are very long, procumbent, their points ascending, and spreading round to a great distance in all directions, densely clothed with a white woolly pubescence. *Leaves* of a silky appearance, densely clothed with a white starry pubescence, of a greyish white underneath and of a glaucous colour on the upper side, margins slightly revolute ; the small lower leaves nearly orbicular or rounded, the middle ones elliptic or oblong, obtuse ; upper ones nearly lanceolate and more acute. *Petioles* short, stellately pubescent, the pubescence close-pressed. *Stipules* linear, linearly-oblong or lanceolate, of a greenish colour, clothed with spreading villous hairs, the margins more or less fringed, and the points tipped with bristly hairs, lower ones very small, upper ones elongated. *Racemes* terminal, 3 to 7-flowered, curved inwards before flowering, afterwards becoming erect. *Bractes* linearly oblong, nearly as long as the

pedicles, villous, of a green colour. *Pedicles* densely canescent, nodding before flowering, erect when in flower, and reflexed after flowering. *Calyx* of a yellow, glaucous colour, minutely pubescent. *Sepals* 5, the 2 outer ones very small, oblong, blunt, of a greener colour: inner ones ovate, concave, obtuse, membranaceous, strongly 4-nerved, the nerves more or less hairy. *Petals* 5, large, much imbricate, more or less crumpled, obcordate, of a bright saffron-colour at the base, and the upper part of a glossy yellow. *Stamens* 40 to 50: *filaments* long and slender, straw-coloured: *pollen* bright yellow. *Germen* densely tomentose. *Style* smooth, slender at the base and thickened upwards, curved round at the bottom. *Stigma* capitate, papillose.

Our drawing was made from an unusually strong plant, growing in the rock-work of the garden belonging to the Apothecaries' Company, at Chelsea, where it covered more than the space of a yard in diameter, and made a grand appearance when covered with flowers. It is a native of Barbary, and the South of Europe, and is all the better for a slight covering in severe frosty weather; though it will succeed well through a mild Winter without the least protection. We have seen specimens of it in Mr. Lambert's Herbarium, that were marked by Dunal himself, so that we are certain of ours being his species. It succeeds well in any light sandy soil, and may be grown in rock-work or in any tolerable dry situation, where it will flower better than if kept in pots, though it is well to preserve a few in pots, which can be kept in frames or some place under cover in severe frosty weather. Young cuttings, planted under hand-glasses, from July to September, will strike root readily.



HELIANTHEMUM glaucum.

Glaucous-leaved Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

* *Petalis luteis.*

H. glaucum, caule suffruticoso ramoso, ramis adscendentibus tomentoso-incanis apice hispidis, foliis margine vix revolutis ciliatis utrinque tomentosis subtus incanis supra viridi-glauculentis; inferioribus orbiculatis; ceteris ellipticis lanceolato-oblongis, stipulis bracteisque pubescentibus viridibus, pedicellis calycibusque hirsutis, pilis albidis. *DC. prodr.* 1. p. 279. n. 80.

Helianthemum glaucum. *Pers. syn.* 2. p. 78. *Spreng. syst.* 2. p. 592. n. 78. *Swt. hort. brit. ed. 2.* p. 42. n. 72.

Cistus glaucus. *Cavan. icon.* 3. p. 31. t. 261. nec *Desf.*

Stem suffrutescent, erect or ascending, much branched: *branches* spreading, ascendant, clothed with a white woolly down, hairy upwards. *Leaves* opposite, petiolate, slightly revolute at the edges, which are fringed; densely clothed on both sides with a short close woolly pubescence, underneath white or hoary, the upper side of a bluish glaucous colour: lower ones broadest, broadly oval or nearly round and obtuse: the upper ones narrower and more acute. *Petioles* hairy and canescent. *Stipules* a little longer than the petioles, of a greener colour. *Racemes* terminal, many-flowered, clothed with soft wool and spreading hairs amongst the flowers, nodding before expansion, afterwards becoming erect. *Bractes* similar to the stipules. *Pedicles* short, woolly, and bearing hairs intermixed with the wool, nodding before expansion, erect when in flower, afterwards reflexed. *Flowers* rather small, pale yellow. *Calyx* of 5 sepals, densely woolly, and numerous hairs intermixed:

the two outer sepals very small, spreading, and of a greener colour: inner ones ovate, concave, veined, hoary. *Petals* 5, of a pale yellow, obovately ovate, rounded at the end. *Stamens* numerous, of various lengths, spreading: *filaments* straw-coloured: *pollen* golden yellow. *Germen* tomentose. *Style* bent a little at the base, shorter than the stamens. *Stigma* capitate.

For the opportunity of giving a figure of this pretty species, we are obliged to Robert Barclay, Esq. from whose collection, at Bury Hill, fine specimens, in full flower, were sent us in August last; this is the only collection in which we have seen it for some time; for being a native of the South of Europe, it is very liable to be killed in severe Winters, if it be not a little protected; a common garden pot, placed over the plant, or the covering of a mat, or a little dry litter, in severe frost, will protect it very well, giving it free access to the air in mild weather, that it may not be drawn up tender; a mixture of light sandy loam and peat suits it very well; and a few plants should be kept in pots, to be preserved in frames, or in the greenhouse in Winter; they can then be turned out, and planted in the borders, or in rock-work, in Spring; a few plants of each sort might also be kept continually in pots, as nothing can make a more brilliant and neat appearance, than a collection of the different sorts grown in pots, and standing together in a close mass; the branches, as they spread over the pots, and are all covered with bloom, make a very splendid appearance; and although the flowers drop every evening, they are succeeded by others for a length of time; and if cut off as soon as overblown, the young shoots that spring forth will be again covered with bloom, which will continue till late in Autumn; young cuttings, planted under hand-glasses, in Spring or Autumn, will soon strike root; young plants may also be raised from seeds.





HELIANTHEMUM leptophyllum.

Narrow-leaved Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra*, fol. 7.

* *Petalis luteis*. DC. prodr. 1. p. 278.

H. leptophyllum, caule suffruticoso lignoso subprocumbente ramoso: ramis erectis aut adscendentibus tomentosiusculis subcinereis, foliis angustis oblongo-linearibus in petiolum brevem attenuatis margine revolutis subtus breviter tomentoso-cinereis supra glabriusculis viridibus, stipulis subulatis pilosis petiolo vix longioribus, racemis longis, calycibus piloso-hirsutis, petalis undulato-crenatis basi imbricatis.

Helianthemum leptophyllum. Dunal in DC. prodr. 1. p. 279. n. 82.

Spreng. syst. veg. 2. p. 592. n. 82. *Swt. hort. brit.* p. 35. n. 59.—

Barrel. ic. f. 442.

Cistus Barrelieri. *Bot. mag.* 2371. excl. synon. non DC.

Cistus stæchadifolius. *Hortulanorum*.

Stem shrubby, hard and woody at the base, ascending or procumbent, clothed with a rugged brown bark, much branched: *branches* spreading in various directions, ascending, slender, clothed with a loose grey tomentum. *Leaves* opposite, the upper one often alternate, narrow, oblongly linear, bluntish, attenuated at the base into a short petiole, the margins much rolled back, underneath strongly nerved, and clothed with a short dense grey tomentum; the upper side channelled, of a dark glossy green and slightly pubescent, the points tipped with short hairs. *Stipules* small, subulate, hairy, scarcely longer than the petioles, and tipped with a fascicle of short bristle like hairs. *Racemes* long and loose, many-flowered, nodding before expansion, afterwards becoming erect. *Bractes* small, linear or lanceolate, hairy and fringed. *Peduncles* reddish brown, woolly, nodding before expansion, erect when in flower, and reflexed when in fruit. *Calyx* of

5 sepals, the 2 outer ones very small, lanceolate, concave, ciliate and tipped with bristle like hairs : 3 inner ones ovate, concave, strongly 4-nerved, with membranaceous margins, the nerves warted with brown warts, and villosely hairy. *Petals* 5, imbricate, broadly obovate, the edges undulate and slightly crenulate, of a light yellow, with a saffron coloured crescent shaped mark near the base. *Stamens* about 40, rather shorter than the style ; *filaments* slender, smooth, pale yellow. *Germen* silky. *Style* twisted at the base, oblique, slender at the base, and thickened upwards. *Stigma* capitate, papilloso fimbriate.

Our drawing of this plant was taken from one obliquely communicated to us by Mr. Anderson, from the Chelsea Botanic Garden, last September, when it was in full bloom for the second time that Summer, the dry weather setting in at the season that they were in bloom the first time, which made the blossoms soon drop, and when the wet set in, they produced fresh blooming shoots ; and many of the species were flowering again in Autumn as fine as in the Spring. Mr. Anderson had received this species under the name of *H. stæchadifolium*, which, as M. Decandolle remarks, is the garden name for it ; he also had it from Mr. Webb, under the name of *H. Barrelieri*, under which name it is figured in the Botanical Magazine, on Mr. Webb's authority ; but it is very different from *H. Barrelieri* of Decandolle and Tenore ; that species belongs to quite a different section : we showed our drawing to M. Lagasca, who immediately recognized it as his *H. angustifolium*, which is the synonym given by M. Decandolle. It is a native of Spain and the South of Europe, and succeeds well on rock-work, in a sheltered situation ; or it will thrive well in pots, in an equal mixture of sandy loam and peat ; cuttings root readily planted under hand-glasses in Autumn ; it may also be raised from seeds, which are sometimes ripened.



HELIANTHEMUM serpyllifolium.

Serpyllum-leaved Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

* *Petalis luteis.*

H. serpyllifolium, caule suffruticoso procumbente ramosissimo: ramis adscendentibus basi glabris apice pilosiusculis, foliis oblongo-ellipticis margine subrevolutis subtùs tomentoso-incanis; suprà intensè viridibus nitidis primùm pilosiusculis dein glabris, stipulis bracteisque viridibus ciliatis, calycibus acuminatis hyalinis canescentibus pube subinconspicua: nervis parce pilosis, petalis distinctis patentissimis.

Helianthemum serpyllifolium. *Mill. dict. n. 8. DC. prodr. 1. p. 280. Spreng. syst. veg. 2. p. 593. Swt. hort. brit. p. 35. n. 60.*

Stem suffruticose, procumbent, very much branched: *branches* crowded, spreading round in all directions, the points ascending, smooth and glossy on the lower part, and warted here and there, the upper part slightly hairy on the young shoots. *Leaves* opposite, crowded, generally distichously spreading and imbricate, flat, or the margins slightly revolute, underneath clothed with a dense white tomentum, the upper side smooth, of a glossy green, hairy while young, the margins more or less fringed with rather distant hairs, which are sometimes singly, and sometimes in small tufts: *lower leaves*, and those on the small branches, roundly oval, bluntish: *upper ones*, and those on the long shoots, oblongly elliptic, or elliptically lanceolate, more acute. *Petioles* shorter than the stipules, slightly pubescent. *Stipules* green, linear, acute, very much fringed with long bristly hairs. *Racemes* terminal, several-flowered, nodding before the expansion of the flowers, afterwards lengthening out and erect. *Bractes* linear, resembling the sti-

pules, also very much fringed. *Pedicles* downy, nodding before expansion, nearly erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, the 2 outer ones very small, oblongly linear, bluntish, much fringed with bristly hairs, the three inner ones slightly pubescent, elliptically lanceolate, concave, acute, transparent and membranaceous, strongly 4-nerved, the nerves green, and thinly clothed with hairs, the points also tipped with hairs. *Petals* 5, distinct, very much spreading, not at all imbricate, obovate, very narrow at the base, of a bright yellow colour, with an elegant orange coloured circle near the base. *Stamens* about 70; *filaments* long and slender, about the length of the style, pale yellow. *Germen* clothed with silky hairs. *Style* nearly straight, smooth, thickening upwards. *Stigma* capitate, papillose.

The present species is readily distinguished from all others by its leaves growing in a distichous form. It is a native of Somersetshire, we having discovered it there in the Autumn of 1826, when we visited that part; we observed it in a bye-lane, leading from Failand-hill to the Farm of Mr. J. Mattocks, of Honour, near Portbury, and no other sort grew there; we have been since informed by Mr. T. Harding, Gardener to the Rev. F. Beadon, of North Stoneham, Hants, to whom we showed our figure, that he also observed it near Wells, in Somersetshire, where he was immediately struck with it as a distinct species; it is quite hardy, and is a very pretty plant for decorating rock-work, thriving well in any light sandy soil. Cuttings of it root readily, planted under hand-glasses, the latter end of Summer or Autumn. Our drawing was made at the Nursery of Mr. Colvill, of the King's-road, Chelsea.





HELIANTHEMUM vulgare.

Common Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra*, fol. 7.

* *Petalis luteis.*

H. vulgare, caule suffruticoso procumbente ramoso; ramis elongatis, foliis margine vix revolutis subtus incano-cinereis: suprà viridibus pilosis subciliatis: inferioribus suborbiculatis: mediis ovato-ellipticis superioribus oblongis, stipulis oblongo-linearibus ciliatis petiolo longioribus, racemis laxis, pedicellis calycibusque pilosis. *DC. prodr.* 1. p. 280.

Helianthemum vulgare. *Gært. fruct.* 1. t. 76. *Pers. syn.* 2. p. 79. *Swt. hort. sub. lond.* p. 124. *Hort. brit.* p. 35. n. 61.

Cistus Helianthemum. *Linn. spec.* 1. p. 744. *Flor. dan.* t. 101. *Sm. eng. bot.* 1321.

Stems suffruticose, procumbent, very much branched: *branches* spreading in all directions, ascending, elongated, slightly hairy, the upper part clothed with a hoary tomentum. *Leaves* very variable, petiolate; lower ones nearly round or broadly ovate, and bluntly rounded: middle ones ovately elliptic or oblong; upper ones elongated, oblong, or lanceolate, acute, slightly revolute at the margins, upper side green and hairy, and punctated with numerous minute dots, which occasions a roughness, underneath clothed with a close-pressed dense white tomentum: the margins more or less ciliate. *Petioles* slender, clothed with close-pressed hairs. *Stipules* leaf-like, linearly lanceolate, acute, hairy and fringed, sometimes about the length of the petioles and sometimes double the length, upper ones longest and broadest. *Racemes* terminal, loose, many-flowered, nodding and involute before the expansion of the flowers, afterwards becoming erect. *Bractes* lanceolate, shorter than the stipules, hairy and fringed, from half to one-third the length of the pedicles. *Pedicles* clothed

with a short white tomentum and a few hairs intermixed, nodding before the flowers expand, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals; the two outer ones small, oblong or ovate, obtuse, very hairy and fringed; 3 inner ones ovately lanceolate, acute, concave inwards, membranaceous, strongly 4-nerved, the nerves very hairy. *Petals* 5, variable in breadth, obovate or broadly wedge-shaped, or sometimes rounded at the points, the margins generally a little crenate, generally more or less imbricate, but sometimes distinct, of a bright yellow; in some plants having a bright orange-coloured lunulate spot near the base, in others of a plain yellow. *Stamens* about 70; *filaments* smooth, scarcely as long as the style. *Germen* downy. *Style* smooth, nearly straight, or a little bent towards the point. *Stigma* capitate, papillose.

Our drawing of this species was taken from plants growing wild in Croome Hurst Wood, near Croydon, in which neighbourhood all the banks and sides of the hedges are covered with it, the soil being of a chalky nature, in which it delights; in the same wood we, in company with Mr. Charlwood, discovered a large patch of *H. surrejanum*, most probably the very one from which the late Mr. Dickson originally procured his plant, which is somewhat altered by culture, as may be seen by comparison of our figure of that species, and the branch given at the bottom of this plate; a plant of it which we planted in our garden has already much broader and flatter leaves, more like Mr. Dickson's plant; the present is certainly the plant of Dillenius's Hortus Elthamensis, as it agrees entirely with his figure and description: both species may be grown in rock-work, and if some chalk be added to the soil, so much the better; they are readily propagated by cuttings, planted under hand-glasses in Autumn.

1. The commonest yellow variety. 2. A scarcer variety, with an orange coloured spot at the base of each petal. 3. *Helianthemum surrejanum*, from a specimen gathered growing wild in Croome Hurst Wood, Surry, differs from the cultivated plant already figured, in being weaker, with fewer flowered racemes, and the leaves being canescent underneath.





HELIANTHEMUM vulgare β *multiplex*.

Common Sun-Rose, two double varieties.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*—* *Petalis luteis.*

H. vulgare, caule suffruticoso procumbente ramoso; ramis elongatis, foliis margine vix revolutis subtùs incano-cinereis: suprà viridibus pilosis subciliatis: inferioribus suborbiculatis: mediis ovato-ellipticis superioribus oblongis, stipulis oblongo-linearibus ciliatis petiolo longioribus, racemis laxis, pedicellis calycibusque pilosis. *DC. prodr. 1. p. 280. Supra fol. 34.*

β *multiplex*, floribus plenis. *Supra.*

* *procumbens*, caule procumbente. *Supra fig. 1.*

** *adscendens*, caule suberecto-adscendente. *Supra fig. 2.*

Differs from the common single varieties at folio 34, by the flowers being double; the largest figure in our plate, which is the old double variety, differs from the other in being more procumbent, and the flowers are fuller; it varies in strength and in the length of its racemes, also in the size of its flowers, according to the strength of the plant; when grown in small pots it lays flat on the ground in a close tuft, its leaves are very small, having quite a different appearance from those plants that are grown out in the borders, where the leaves attain four times the size, and the racemes and flowers are much larger: the other variety, No. 2 of our plate, which is known by the name of Mr. Lee's new double yellow, is distinguished by being more erect and shrubby, and the flowers do not generally expand to the centre, but are there terminated by a greenish close tuft, not unlike a calyx, and the plant is altogether of stronger growth than the other; the same difference in habit we have observed in the common single varieties, when growing together wild.

Both the present varieties are very desirable for rock-work, as they are quite hardy, and need not the least protection, or they may be grown in small pots, where they make a handsome appearance when covered with flowers, and may be turned out of them, and planted into the ground at any season without injury. Cuttings of them, planted under hand-glasses, after they have done flowering, will strike root readily, and will soon become nice young plants. Our drawing was made at the Nursery of Mr. Lee, at Hammersmith, last Summer.





Waidell. Ic.

Feb. by Lidingway July 1826.

Thore Del.

HELIANTHEMUM surrejanum.

Dotted-leaved Sun-Rose.

Sect. IX. EUHELIA THEMUM. *Supra*, fol. 7.

* *Petalis luteis.*

H. surrejanum, caule suffruticoso procumbente, foliis oblongis ovatis ellipticis lanceolatisve viridibus margine vix revolutis: supra hirsutiusculis subtus ramisque stellato-pubescentibus, racemis multifloris, petalis lanceolatis subdentato-laciniatis, staminibus brevissimis.

Helianthemum surrejanum. *Mill. dict. n. 15. Pers. syn. 2. p. 78.*

DC. prodr. 1. p. 280. Spreng. syst. veg. 2. p. 592. Swt. hort. sub. lond. p. 123. Hort. Brit. p. 35. n. 62.

Cistus surrejanus. *Linn. spec. 743. Willden. sp. pl. 2. p. 1202.*

Smith Eng. bot. 2207. Compend. flor. brit. ed. 4. p. 95.

Stem suffruticose, procumbent, much branched, spreading in all directions: *branches* more or less warted with brownish purple warts, and clothed with fascicles of short stellate hairs. *Leaves* variable, lower ones nearly round or broadly ovate, others oblong, elliptic or broadly lanceolate, obtuse or scarcely acute, green on both sides, but paler underneath, flat, or the margins very slightly revolute, dotted with numerous small dots, thinly clothed with short hairs on the upper side, and with fascicles of short stellate ones on the lower. *Petioles* hairy, shorter than the stipules. *Stipules* linearly-lanceolate, flat, or their margins slightly reflexed, ciliate, longer than the petioles. *Racemes* terminal, many-flowered, nodding before the flowers expand, the point involute, but lengthening out and becoming erect after the expansion of the flowers. *Bractes* short and flat, clothed with short hairs, the margins fringed. *Pedicles* nodding before the expansion of the flowers, erect when in bloom, afterwards reflexed, canescently tomentose, and also clothed with

fascicles of short stellate hairs. *Calyx* of 5 sepals; the two outer ones very short, oblong, blunt, clothed with a mealy pubescence; inner ones ovate, obtuse, concave, membranaceous, yellowish, strongly 4-nerved, slightly covered with a mealy pubescence, the nerves clothed with tufts of spreading hairs. *Petals* 5, very narrow, lanceolate, acute, generally toothed or lacerate, seldom entire, quite distinct and spreading, sometimes scarcely as long, at other times nearly double the length of the calyx, of a plain yellow colour. *Stamens* about 50, unequal in length, but very short, scarcely as long as the germen: *filaments* smooth, yellow. *Germen* downy. *Style* smooth, slender, and twisted at the base, and thickened upwards. *Stigma* capitate, papillose.

Specimens of this rare plant were brought to us last Summer by Mr. David Don, from the garden of Mrs. Dickson, of Croydon, in Surrey, where the plant had been planted by the late Mr. Dickson, who discovered it growing wild near that place; but at present, we believe, no person knows where to find it wild; or it has perhaps been sometimes overlooked or confused with *H. vulgare*: we heard of its being found last year near Dartford, in Kent; but as we have not seen specimens of it, we are not certain if it really were the same species; it is certainly a very likely situation for it: we observed the flowers of it come much larger in Autumn, than they did in Summer, nearly equal in size to the *Cistus sampsucifolius* of the Botanical Magazine, which will most probably prove to be the same species, as Dr. Sims was rather inclined to believe when he published it; or perhaps that may be a hybrid production between the present and some other species. The present plant is quite hardy, thriving well in rock-work or by the side of a bank, where it will not be killed by too much moisture; it may also be grown in pots, where it will flower very fine, and will not grow so luxuriant. Cuttings, planted under hand-glasses, root readily.





HELIANTHEMUM grandiflorum.

Large-flowered Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol.* 7.

* *Petalis luteis.*

H. grandiflorum, caule suffruticoso adscendente, ramis piloso-hirsutis, foliis superioribus subplanis oblongis pilosiusculis supra viridibus subtus nunc viridibus nunc dilute cinereis, stipulis ciliatis petiolo sublongioribus, floribus magnis, calycibus subhirsutis. *DC. prod.* 1. p. 280.

Helianthemum grandiflorum. *DC. fl. fr.* 4. p. 821. *Swt. hort. brit.* p. 35. n. 64.

Cistus grandiflorus. *Scop. carn. ed.* 2. n. 648. t. 25.

Stem suffruticose, much branched, ascending: *branches* hairy when young, but becoming at length nearly smooth, spotted or tinged with light purple. *Leaves* opposite, flat, or nearly so, oblong, bluntish, clothed with short closely-pressed hairs, green on both sides, or sometimes a little whitish at the back; young ones more hairy than the older ones. *Petioles* short, pubescent. *Stipules* linearly lanceolate, acute, fringed, longer than the petioles. *Racemes* terminal, nodding before expansion, afterwards becoming erect. *Bractes* scarcely so long as the pedicles, resembling the stipules, but rather shorter. *Pedicles* downy, nodding before the expansion of the flowers, then becoming erect, after flowering reflexed. *Calyx* of 5 sepals, a little hairy, the hairs pressed inwards; two outer ones very small, more hairy than the inner ones, fringed: inner ones ovate, concave, membranaceous between the nerves. *Petals* 5, large, broadly obovate or obcordate, very much imbricate, of a bright straw-colour. *Stamens* numerous, unequal in length. *Style* twisted, about the

length of the stamens, slender at the base, and thickened upwards. *Stigma* capitate.

According to M. Decandolle, the present species is a native of the Alps and Pyrenees, also of Tauria; but we believe the Taurian plant to be a distinct species, being of quite a different habit, and laying quite flat on the ground, where its branches spread to a considerable distance; we saw several plants of it last year at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, who raised it from seeds received under the name of *Cistus tauricus*.

Our drawing of the present plant was made at the Nursery of Mr. Colvill; we also received specimens of it from Mr. Mackay, of the Clapton Nursery. It is nearly related to *H. vulgare*, but is of much stronger growth, and its flowers are of a paler colour, and considerably larger. It makes a pretty plant for the adorning of rock-work, or it may be grown in a small pot, and will endure our Winters, except very severe ones, without protection. Cuttings of it, planted under hand-glasses, in Autumn, strike root freely.

105.



W. 3221. 10.

Pub by J. R. Gray Nov 1858

Herb. Dr.

HELIANTHEMUM tauricum.

Taurian Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

* *Petalis luteis.*

H. tauricum, caule suffruticoso ramosissimo procumbente; ramis procumbentibus piloso-hirsutis, foliis oblongo-lanceolatis margine subrevolutis utrinque pilosis supra viridibus subtus pallidioribus, stipulis lanceolato-linearibus ciliatis petiolo longioribus, floribus magnis, calycibus nitidis subhirsutis, petalis imbricatis.

Helianthemum tauricum. Fischer Mss. Swt. hort. brit. edit. 2. p. 42. n. 79.

Stem suffruticose, very much branched, trailing flat on the ground: *branches* lengthening out to a considerable distance, spreading flat on the ground, thickly clothed with entangled hairs, which gives them a rough appearance. *Leaves* opposite, oblong, or oblongly lanceolate, blunt, hairy on both sides, the margins slightly revolute, of a dark brownish green on the upper side, and rather paler underneath, but not hoary. *Stipules* very long, lanceolately linear, acute, hairy and fringed, more than twice the length of the petioles. *Racemes* terminal, many-flowered, nodding before the flowers expand, afterwards becoming erect. *Peduncles* very hairy, with short tomentum underneath. *Bractes* similar to the stipules. *Pedicles* tomentosely hairy, nodding before the flowers expansion, erect when in bloom, afterwards reflexed. *Flowers* large, pale yellow. *Calyx* of 5 sepals; the two outer ones small, very hairy, spreading: the three inner ones ovate, strongly veined, hairy, but glossy, the nerves of a reddish purple. *Petals* 5, broad, imbricate, broadly obovate, uneven at the edges, of a pale yellow. *Stamens* numerous, spreading: *filaments*

yellow : *pollen* orange-coloured. *Style* bent at the base, smooth. *Stigma* capitate, papillose.

Our drawing of this pretty species was made from a plant at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham, who raised it from seeds several years since, that had been given them by A. P. Hove, Esq. as the *H. tauricum* of Dr. Fischer ; it has most probably been confused with *H. grandiflorum* by many authors, as that species is said to be a native of Tauria, as well as of the South of Europe ; but when the plants are seen growing together, no two species had need appear more distinct, the present spreading flat on the ground, and extending its branches round to a great distance, and these are only slightly suffrutescent at the base, whereas *H. grandiflorum* grows upright, or its branches spreading and ascendent, forming a neat little bushy shrub.

The present plant is well adapted for the ornamenting of rock-work, as its spreading branches will cover a good space in a short time, and it is easily kept within bounds, by cutting in the longest branches occasionally, the young branches that then shoot out will all be terminated by racemes of flowers, so that by that means a succession of bloom may be kept up from the latter end of May till October ; it succeeds well in a light sandy soil, or a mixture of loam and peat will suit it very well ; young cuttings, planted under hand-glasses the latter end of Summer, will strike root in a few days.



HELIANTHEMUM *barbatum*.

Bearded Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

* *Petalis luteis.*

H. barbatum, caule suffruticoso erecto ramosissimo: ramis fasciculato-pilosis, foliis hirsutis utrinque viridibus: inferioribus subrotundo-ovatis; superioribus ellipticis, stipulis oblongis ciliato-hirsutis petiolo longioribus, racemis longis hirsuto-barbatis multifloris, calycibus verrucosis hirsutis, petalis crenulatis basi imbricatis.

Helianthemum barbatum. *Pers. syn. 2. p. 79. Willd. enum. supp. p. 39. Link enum. 2. p. 76.*

Cistus barbatus. *Lam. dict. 2. p. 24.*

Stem suffruticose, erect or ascending, very much branched: *branches* erect, thickly clothed with bunches of spreading shaggy hairs, as is every other part of the plant, except the corolla. *Leaves* opposite, crossing each other, rather crowded, underneath strongly nerved, bluntish: lower ones nearly round or ovate: upper ones elliptic, all hairy on both sides, the hairs in stellate bunches; of a pale green colour on both sides, but palest underneath. *Petioles* rather long, a little flattened on the upper side, and rounded on the lower. *Stipules* leaf-like, oblong, bluntish, fringed, a little longer than the petioles. *Racemes* terminal, many-flowered, densely hairy or bearded with long hairs, much lengthened after flowering, curved inwards before the flowers expansion, afterwards erect. *Bractes* oblong or ovate, obtuse, fringed. *Pedicles* of a brownish purple, nodding before flowering, erect when in flower, afterwards recurved. *Calyx* of 5 sepals, the 2 outer ones small, ovate or oblong, obtuse, inner ones

roundly ovate, obtuse, concave, strongly 4-nerved, the nerves of a brownish purple, much warted, and thickly clothed with bunches of spreading villous white hairs. *Petals* 5, obovate or obcordate, with crenulate margins, more or less crumpled, of a bright yellow, rather darkest at the base. *Stamens* from 60 to 70, longer than the style; *filaments* smooth, slender, yellow: *pollen* bright yellow. *Germen* sericeous. *Style* shorter than the filaments, twisted at the base, thickening upwards. *Stigma* capitate, papillose.

The present very distinct species, is a native of the South of Europe, but succeeds well in the open air of this country, without any protection; it is a very desirable plant for the adorning of rock-work, and succeeds well in any light sandy soil; it also thrives and flowers well in small pots, in which manner a collection of the various species and varieties of this handsome genus may be grown to great advantage, and will make a fine show when in bloom; and those sorts that are rather tender, may have a mat or two thrown over them in severe frosty weather, which is all the protection they require, this will also answer the same purpose as rock-work, where it is inconvenient to erect it; and the greater part of them are cheap plants, so that a collection may be obtained at a small expence; and what sorts cannot be bought at one nursery, may be procured at some of the others. Cuttings of them all strike root freely, planted under hand-glasses, in August or September.

Our drawing was made from a plant in the extensive collection at the Garden belonging to the Apothecaries' Company at Chelsea, where it was raised from seed that Mr. Anderson received from France.



HELIANTHEMUM nummularium.

Money-wort-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.—* Petalis luteis.*

H. nummularium, caule suffruticoso: ramis procumbentibus hirsutis, foliis inferioribus orbiculatis; superioribus oblongo-linearibus hirsutis subtus viridi-cinereis, stipulis lineari-oblongis petiolo duplò longioribus, racemis calycibusque hirsutis, petalis subimbricatis.

Helianthemum nummularium. DC. *prodr.* 1. p. 280. *Mill. dict.* n. 11.
Swt. hort. brit. p. 35. n. 67.

Helianthemum obscurum β *nummularium*. DC. *fl. fr.* 6. p. 624.

Cistus nummularius. α . *Lin. spec.* 743. *nec Desf. et. Cav.*

Stems suffruticose, procumbent: *branches* long, spreading in all directions, thickly clothed with rigid hairs. *Leaves* variable, hairy on both sides, rough, flat, or the upper ones very slightly revolute, of a dull green on the upper side, and paler underneath: lower ones nearly orbicular or rounded, others ovate or elliptic, obtuse; upper ones oblongly linear, acute, all hairy on both sides and ciliate. *Petioles* very short and very hairy. *Stipules* linearly oblong, hairy and fringed, double the length of the footstalks. *Racemes* several-flowered, curved inward before the flowers expand, afterwards lengthening out, and remaining erect. *Bractes* oblongly linear, hairy and ciliate. *Peduncles* brown, thickly clothed with hispid hairs, nodding before the flowers expansion, nearly erect when expanded, after flowering reflexed. *Calyx* of 5 sepals, which are hispidly hairy: 2 outer ones small, oblong, bluntish: inner ones concave, membranaceous, bluntish, 4-angled, middle angles of a brownish purple, outer ones green. *Petals* 5, slightly imbricate, obcordate, slender and distinct at

the base, of a bright yellow, darkest at the bottom. *Stamens* about 80, about the length of the style: *filaments* very slender, smooth, pale yellow: *anthers* small, attached to the filament by the back: *pollen* light orange-coloured. *Germen* clothed with close-pressed silky hairs. *Style* smooth, bent near the base. *Stigma* capitate, granular.

The present plant is nearly related to *H. vulgare*, but is readily distinguished by its broader flat leaves, that are green on both sides; we believe it to be the *H. obscurum* of most authors; but as the present name has the right of priority, that of *obscurum* may now be dropt altogether, as the *H. obscurum* of Decandolle is without doubt the *H. barbatum* of Lamarck, which is the oldest name; that is a very distinct species from the present, always growing erect, whereas the present is always procumbent, and is much less hairy. It is quite hardy, being a native of France, Switzerland, and Italy, succeeding well in the open border, or in rock-work, thriving best in a light sandy soil: young cuttings, planted under hand-glasses, root readily.

Our drawing was made from a plant at the Nursery of Mr. Colvill, who received it from Switzerland.

We have this Summer flowered plants of *H. tomentosum* (*Cistus tomentosus* of English Botany), brought from Scotland last year by Mr. D. Don, and they prove to be nothing more than *H. vulgare*, as has been already stated by Dr. Hooker: plants brought by us from the neighbourhood of Croydon, flowered by the side of it in our garden, and we could not perceive the least difference in them.





HELIANTHEMUM hirtum.

Bristly-calyxed Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 17.*

* *Petalis luteis.*

H. hirtum, caule suffruticoso ramoso, ramis adscendentibus numerosis tomentoso-hirtis cinereis, foliis ovatis seu oblongis margine revolutis tomentoso-hirtis subtus canescentibus suprà viridi-cinereis, stipulis angustis petiolo sublongioribus, calycibus hirsutissimis albidis, petalis obcordatis imbricatis.

Helianthemum hirtum. *Pers. syn. 2. p. 79. DC. prodr. 1. p. 281. Spreng. syst. 2. p. 593. Swt. hort. brit. ed. 2. p. 42. n. 85.*

Cistus hirtus. *Linn. spec. 744. Cavan. icon. 2. p. 37. t. 146. Smith flor. græc. t. 501.*

Stem suffrutescent, producing numerous branches from the base : *branches* ascending, clothed with a hoary canescence, and innumerable spreading hairs. *Leaves* opposite, the lower ones ovate, the others oblong, obtuse, revolute at the margins, thickly covered with spreading hairs : upper side of a pale green ; underneath clothed with a close white tomentum. *Petioles* short, hairy. *Stipules* rather small, but longer than the petioles, those at the upper leaves largest, very hairy. *Racemes* terminal, several-flowered, at first nodding, but becoming erect as the flowers expand. *Bractes* similar to the stipules, but rather larger. *Pedicles* slender, nodding before the flowers expansion, erect when in bloom, afterwards reflexed, densely hairy. *Calyx* of 5 sepals, densely covered with spreading white hairs ; the two outer ones narrow, linear, spreading, of a brightish green : the inner ones ovate, acute, concave, strongly veined, of a pale whitish green colour. *Petals* 5, imbricate, obcordate, veined from the base, where they terminate in a saffron-coloured spot. *Stamens* numerous, of various lengths : *filaments*

yellow : *pollen* golden yellow. *Germen* woolly. *Style* a little bent at the base, about the length of the stamens. *Stigma* a sort of club-shaped head.

The present pretty species is a native of the South of Europe, and the Levant, and therefore requires a little protection in severe frosty weather; if planted out in rock-work, the covering of a mat or a little hay or straw, or any other dry covering, will be sufficient to protect it in the severe frost, giving it full admission to the air when the weather is mild; or if the plants are not too large, a common garden pot placed close over them in frosty weather will preserve them very well. It is also a good plan to have some in small pots, to preserve in frames all the Winter; they can then be turned out wherever they are wanted in Spring, as at that time they will grow very fast, and will soon make fine plants: a mixture of sandy loam and peat is a very proper soil for them; and young cuttings, planted under hand-glasses, in August or September, will strike root freely.

Our drawing was made from a plant in the rock-work at the Botanic Garden belonging to the Apothecaries' Company, at Chelsea, in the Summer of 1828.





W. & A. G.

Print by J. H. & J. H. & J. H.

J. H. & J. H.

HELANTHEMUM Andersoni.

Mr. Anderson's Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

* *Petalis luteis.*

H. Andersoni, caule suffruticoso procumbente ramoso; ramis ascendentibus tomentoso-canescens, foliis oblongo-lanceolatis acutiusculis tomentosiusculis supra cinereis subtus canescentibus margine parum revolutis, stipulis linearibus subulatis ciliatis petiolis paulo longioribus, calycibus tomentosis, petalis imbricatis.

Suffruticose, procumbent, very much branched, soon forming a large spreading dense tuft: *branches* ascending, rather slender, densely clothed with a close-pressed white tomentum, as are the petioles, peduncles, pedicels, and calyx. *Leaves* opposite, oblongly lanceolate, bluntish or scarcely acute, the margins slightly rolled back, the upper side clothed with a thinnish loose wool, and of a greyish hoary colour, underneath clothed with a dense white tomentum. *Stipules* linearly subulate, fringed and terminated with longish hairs, rather longer than the petioles. *Racemes* terminal, long, many-flowered, nodding before the flowers expand, afterwards becoming erect. *Bractes* linear, acute, flat, of a green colour, broader than the stipules, their margins tomentose. *Pedicels* densely clothed with a close-pressed white tomentum, nodding before the flowers expansion, then becoming erect, afterwards becoming reflexed, and twisted when in fruit. *Calyx* persistent, clothed with a white tomentum, also with woolly spreading hairs; two outer sepals very small, ovately lanceolate, bluntish: the three inner ones broadly ovate, concave inwards, scarcely acute, strongly 3 or 4-nerved,

transparent between the nerves, showing the yellow petals through before they expand. *Petals* 5, roundly obovate, very much imbricate, varying on the same plant from a bright yellow to a pale straw-colour, generally marked with a saffron-coloured spot near the base. *Stamens* numerous: *filaments* yellow: *pollen* orange-coloured. *Germen* tomentose. *Style* smooth, very slender, and twisted near the base, thickening gradually upwards. *Stigma* capitate, papillose. *Capsule* tomentose, large and inflated, triangular, three-celled, 9 to 12-seeded. *Seeds* brown, angular, rough.

This pretty and curious plant is of hybrid origin, having been produced from the seed of *H. croceum*, that was fertilized by the pollen of *H. pulverulentum*, in the rock-work, at the Apothecaries' Company's Garden at Chelsea, where it sowed itself last year, and this year produced flowering plants, that grew very fast, and were covered with flowers from May last, to the end of November; the flowers were very variable, some being of a bright yellow, and others on the same plant, and sometimes on the same branch, of a pale straw-colour, so that they made a curious variegated appearance, the yellow flowers coming nearest to the female parent, and the straw-coloured ones approaching nearer to the male, which was a white-flowered species; the form of the leaves and habit of the plant is also intermediate between the two. It is a very desirable plant for ornamenting rock-work, as it continues in flower for such a length of time, and is also a fast grower; it also succeeds well in small pots, planted in a light sandy soil; and young cuttings, planted under hand-glasses in Autumn, strike root readily.

We have named it in compliment to our respected friend, Mr. William Anderson, to whom we are obliged for the opportunity of making drawings of many rare species, which we have not seen in any other collection.



W. & A. Nichol

Pub. by J. H. & J. W. Nichol

Mrs. D. Nichol

HELIANTHEMUM eriosepalon.

Woolly-calyxed Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. eriosepalon, caulibus ramosis procumbentibus tomentosiusculis apice incanis, foliis lanceolatis acutis margine sub-revolutis utrinque viridibus stellato-pilosis, stipulis linearibus acutis ciliatis petiolo duplo longioribus, racemo terminali multifloro, calycibus tomentoso-pilosis, petalis obovatis crenulatis basi distinctis.

Helianthemum eriosepalon. *Swt. hort. brit. p. 469. n. 96.*

Stems procumbent, rough and rugged, much branched: *branches* spreading in all directions, slightly tomentose, the upper part more densely so and canescent. *Leaves* opposite, petioled, lanceolate, acute, the margins more or less uneven, a little undulate, and slightly revolute, green on both sides, and clothed with fascicles of longish hairs, which are stellately spreading. *Petioles* also clothed with fascicles of hairs, channelled on the upper side and rounded underneath. *Stipules* linear, acute, fringed with long hairs, green on both sides, generally about double the length of the footstalks. *Racemes* long, tomentose, many-flowered, nodding before the expansion of the flowers, afterwards becoming erect. *Pedicels* densely tomentose, drooping before the expansion of the flowers, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, densely clothed with woolly hairs, the two outer ones very small, lanceolate, bluntish, channelled on the upper side, three inner ones ovate, unequal on one side, membranaceous, strongly 4-nerved, concave on the upper side and convex below. *Petals* 5, obovate, crenulate, sometimes emarginate, of a pale sul-

phur colour, with a yellow mark near the base. *Stamens* about 60, about the length of the style: *filaments* very slender, smooth, pale yellow; *pollen* golden yellow. *Germen* downy. *Style* smooth and bent a little near the base, thickening upwards. *Stigma* capitate, slightly 3-lobed, papillose.

The present plant is nearly related to *H. sulphureum*, but differs sufficiently in habit, and in its woolly calyx, the calyx of *H. sulphureum* being glossy, and nearly smooth. The present is a very proper plant for adorning rock-work, or to grow in small pots, and will stand the severity of our Winters in the open air without protection, continuing in bloom the greater part of the Summer; it succeeds well in a light sandy soil, or a mixture of sandy loam and peat will suit it very well. Young cuttings, planted under hand-glasses, in Autumn, strike root immediately.

Our drawing was made from a plant at the Nursery of Mr. Colvill, King's-road, Chelsea.



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HELIANTHEMUM stramineum.*Straw-coloured Sun-Rose.*Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. stramineum, caulibus ramosis elongatis procumbentibus apice tomentosiusculo-pubescentibus, foliis planis aut margine vix recurvis supra viridibus pilosis subtus tomentoso-incanis: inferioribus rotundo-ovatis obtusis: superioribus oblongo-lanceolatis acutiusculis, stipulis linearibus acutis ciliatis petiolo duplo longioribus, racemis multifloris, calycibus striatis glabriusculis, petalis obovatis patentibus distinctis.

Suffrutescent, procumbent, very much branched: *branches* elongated, and spreading round to a considerable distance, thickly clothed with short hairs when young, and the upper part with a canescent tomentum. *Leaves* opposite, petiolate, flat, or very slightly recurved at the margins, the upper side of a dark green and very hairy, underneath clothed with a close white tomentum: lower ones roundly oval and obtuse; the upper ones much longer, oblongly lanceolate, and more acute. *Petioles* short, hairy, flat on the upper side, and rounded underneath. *Stipules* linear, acute, fringed, more than double the length of the petioles, green on both sides. *Racemes* terminal, many-flowered, nodding before the expansion of the flowers, afterwards becoming erect. *Bractes* linear, acute, fringed, and hairy, about the length of, or nearly as long as the pedicles. *Pedicles* tomentose, and clothed with short hairs, drooping before the expansion of the flowers, erect when they are expanded, afterwards reflexed, and more or less twisted. *Calyx* of 5 sepals; the two outer ones small, linear, dark

green, very hairy, and generally reflexed at the points; the three inner ones broadly ovate, bluntish, concave inwards, membranaceous, strongly 3 or 4-nerved, between the nerves smooth and glossy, the nerves hairy. *Petals* 5, obovate, narrow at the base and rounded at the point, distinctly spreading, not at all imbricate, of a bright straw-colour. *Stamens* numerous, scarcely so long as the style: *filaments* smooth, yellow: *pollen* orange-coloured. *Germen* triangular, downy. *Style* smooth, twisted at the base, where it is very slender, becoming gradually thickened upwards. *Stigma* capitate, slightly 3-lobed, papillose.

Our drawing of this pretty plant was made at the Nursery of Mr. Mackay, at Clapton, last Summer, where we saw several fine plants of it in full bloom; we are not certain whether it is an original species, or a hybrid production, but most probably the latter; as from its colour, we should suspect it to be intermediate between one of the white, and one of the yellow flowered species: it is a very free grower, and an abundant bloomer, and succeeds well in rock-work, or in a dry border; or it may be grown in small pots, in a mixture of sandy loam and peat, when of course it will be more dwarf, and its flowers will not be quite so large, but still will make a handsome appearance, intermixed with other species and varieties; in our opinion nothing can appear more brilliant and interesting than a good collection of the dwarf species when in bloom, if grown in pots and placed together in a group, that their differences may be more readily observed; the present plant is readily increased by young cuttings, planted under hand-glasses, any time from the beginning of August to the end of September.





HELIANTHEMUM stramineum β *multiplex*.*Full-flowered straw-coloured Sun-Rose.*Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. stramineum, caulibus ramosis elongatis procumbentibus apice tomentosiusculo-pubescentibus, foliis planis aut margine vix recurvis supra viridibus pilosis subtus tomentoso-incanis : inferioribus rotundo-ovatis obtusis : superioribus oblongo-lanceolatis acutiusculis, stipulis linearibus acutis ciliatis petiolo duplo longioribus, racemis multifloris, calycibus striatis glabriusculis, petalis obovatis patentibus distinctis. *Supra fol. 93.*

β *multiplex*, caulibus apice adscendentibus, foliis minoribus, petalis multiplicibus. *Supra 94.*

Suffrutescent, much branched : *branches* slender, procumbent, the points ascending, warted a little, and thinly clothed with a short woolly pubescence. *Leaves* opposite, petiolate, smaller than in the single variety, flat or slightly recurved at the margins, the upper side hairy and of a dark green, underneath clothed with a white tomentum : lower ones nearly round, or roundly oval, obtuse ; the upper ones oblong or lanceolate, becoming gradually narrower upwards, and more acute. *Petioles* short, flattened on the upper side, and rounded below. *Stipules* linear, acute, fringed, green on both sides, generally more than twice the length of the petioles. *Racemes* terminal, several-flowered, nodding before the flowers expansion, becoming gradually erect as they expand. *Bractes* linearly lanceolate, acute, hairy, about the length of the pedicles, or sometimes not quite so long. *Pedicles* clothed with a woolly pubescence, nodding in the bud state, and becoming erect as the

flowers expand. *Calyx* of 5 sepals: the two outer ones very small, green, and hairy: the three inner ones, ovate, blunt, concave inwards, membranaceous, strongly 3 or 4-nerved, smooth and glossy, the nerves slightly hairy. *Flowers* very double or full of petals, that are unequal in size and form, of a pale straw-colour, marked with orange at the base, and more or less veined with green.

Our drawing of this pretty double variety was made from a plant at the Nursery of Mr. Lee, at Hammer-smith; it is not so strong a grower as the single variety, but makes a very pretty plant for a pot, or for the ornamenting of rock-work, thriving well in a light sandy soil, mixed with a proportion of peat; and when covered with its pretty double flowers, it makes an elegant appearance, particularly when intermixed with some of the brighter flowered and more brilliant species; it is not quite so hardy as some of the sorts, and some pots of it should be preserved in frames through the Winter; or if planted in rock-work, should be covered in severe frost, by an empty pot being placed over each root, or a little hay or straw, or some other covering, when it will succeed very well: young cuttings, planted under hand-glasses in August or September, soon strike root.





HELIANTHEMUM sulphureum.

Sulphur-coloured Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. sulphureum, caulibus ramosis procumbentibus scabriusculis tomentosiuseculis subincanis, foliis lanceolatis planis supra viridibus subtus pallidioribus utrinque stellato-pubescentibus, stipulis foliaceis angusto-lanceolatis acutis ciliatis petiolo triplo longioribus, racemo terminali paucifloro, calycibus membranaceis striatis glabriusculis nitidis, petalis obovatis crenulatis patentibus distinctis. **Helianthemum sulphureum.** *Willden. enum. supp. 39. DC. prodr. 1. p. 283. n. 107. Spreng. syst. veg. 2. p. 593. n. 90. Swt. hort. sub. lond. p. 124. n. 41. Hort. brit. p. 36. n. 81.*

Stems suffruticose, procumbent, branching in all directions: *branches* rough, occasioned by little tubercles or warts, on which little fascicles of hairs have been seated, the upper part clothed with a thin loose tomentum. *Leaves* flat, opposite, petiolate, lanceolate, acute, or the lower ones obtuse, dark green on the upper side, and paler underneath, both sides clothed with fascicles of hairs, which are stellately spreading, margins rough and uneven. *Petioles* short, warted, flat on the upper side, and rounded on the lower. *Stipules* leaf-like, narrowly lanceolate, acute, ciliate, about 3 times longer than the footstalk of the leaf, green on both sides. *Racemes* terminal, few-flowered, nodding before the expansion of the flowers, then becoming erect. *Bractes* lanceolate, acute, ciliate, rather more than half the length of the pedicles. *Pedicles* tomentose, nodding before expansion, erect when expanded, afterwards reflexed. *Calyx* of 5 sepals; the two outer ones very small, narrowly lanceolate, oblique, acute, fringed, purple at the base, the upper part green: inner ones narrowly ovate, acute, concave, membranaceous, strongly

4-nerved, glossy, the nerves slightly hairy. *Petals* 5, obovate, crenulate, generally notched at the point, widely spreading, distinct, or sometimes slightly overlapping at the base, of a bright sulphur colour, yellower towards the base. *Stamens* above 50, shorter than the style. *Germen* globular, downy. *Style* smooth, bent about the middle, much thickened below the stigma, and becoming gradually slenderer downwards. *Stigma* capitate, slightly 3-lobed, pustulose.

This pretty little plant is a native of Spain, and is well adapted for the ornamenting of rock-work, when mixed with other species; it will stand our mildest winters well without the least covering, but in very severe frosts it requires a little protection, either with a mat or some straw or fern, except there be a sufficient quantity of snow to protect it; plants of it may also be grown in pots in a light sandy soil, where they will thrive well, and produce an abundance of flowers; they can then be protected by being placed in a frame in severe weather; like the other species of this section, it succeeds well by cuttings, planted under hand-glasses in August or September, when they will soon strike root.

Our drawing was taken from a plant at the Nursery of Messrs. Whitley, Brames, and Milne, last Summer.

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Walden, N.Y.

Pub. by J. R. Rogers, March, 1822.

Flora, Del.

HELIANTHEMUM cupreum.

Copper-coloured Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. cupreum, caule suffruticoso procumbente; ramis adscendentibus tomentosiusculis adultis glabris, foliis oblongo-lanceolatis canaliculatis: supra viridibus hirsutis; subtus tomentoso-incanis, stipulis lanceolatis acutis ciliatis apice setosis petiolo duplo longioribus, calycibus tomentoso-pilosis, petalis imbricatis.

Stem suffruticose, procumbent, branching in all directions: *branches* ascending, purple, when young clothed with a thin tomentum, which wears off by age, they then become smooth and glossy, but are thinly warted. *Leaves* oblongly-lanceolate, scarcely acute, rather concave and channelled on the upper side, which is green and hairy; underneath clothed with a close dense white tomentum, the margins slightly rolled back: upper leaves narrowest and more acute. *Petioles* short, pubescent. *Stipules* lanceolate, acute, about twice the length of the petioles, fringed with long hairs, the ends of which bend inwards, the points setose, or tipped with little bristle-like hairs. *Racemes* terminal, several-flowered, nodding before expansion, afterwards becoming erect. *Bractes* lanceolate, fringed, more than half the length of the pedicles, sometimes full the length. *Pedicles* downy, nodding before the expansion of the flowers, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, the two outer ones very small, oblong, obtuse, hairy, the three inner ones ovate, scarcely acute, concave, strongly 3 or 4-nerved, very hairy on the nerves, the hairs in bunches, which are

seated on small tubercles or warts, margins and between the nerves membranaceous and tomentose. *Petals* 5, a little longer than the calyx, broader than long, rounded, very much imbricate, of a dark copper colour, with a darker mark at the base. *Stamens* from 50 to 60: *filaments* smooth, bright yellow, longer than the style. *Germen* tomentose. *Style* smooth, a little bent, and very slender at the base, thickening upwards. *Stigma* capitate, papillose.

Our drawing of this plant was made at the Nursery of Mr. J. Lee, at Hammersmith, last Summer; it is most probably a hybrid production, as its leaves are very frequently variegated; it makes a very pretty plant for the adorning of rock-work, where it will flower the greater part of the Summer; or it will thrive well in small pots, in a mixture of light sandy loam and peat, when it will require a little protection in Winter, either in frames, or to be covered with a mat in frosty weather. Cuttings root freely, planted under hand-glasses, in Autumn.



W. & A. G. & Co.

Printed by J. H. & J. W. & Co.

J. H. & J. W. & Co.

HELIANTHEMUM Milleri.

Mr. Miller's Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. Milleri, caule suffruticoso procumbente, ramis hirsuto-tomentosis, foliis oblongis obtusiusculis planis utrinque viridibus hirsutis, stipulis falcatis petiolo longioribus, calycibus hirsutis, petalis imbricatis.

Stem suffrutescent, procumbent: *branches* also procumbent, thickly clothed with short soft woolly hairs and soft down underneath, the points ascending a little. *Leaves* opposite, flat, dull green on both sides, thickly covered on both sides with stiffish hairs which are generally in pairs: lower ones of a roundish oval, quite obtuse: the upper ones longer, oblong, or oblongly lanceolate, more acute. *Petioles* thickly clothed with woolly hairs, scarcely so long as the stipules, flattened on the upper side, and rounded underneath. *Stipules* somewhat falcate, linear or lanceolately linear, hairy and fringed: lower ones very small, scarcely longer than the petioles, the upper ones very long, about twice the length of the petioles. *Racemes* terminal, many-flowered, nodding before expansion, and becoming erect as the flowers expand. *Bractes* similar to the stipules. *Pedicels* clothed with a short tomentum, nodding before the expansion of the flowers, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals; the two outer ones small, linear, obtuse: the three inner ones ovate, concave, acute, strongly 3 or 4-nerved, membranaceous

between the nerves, which are thickly clothed with bristle-like hairs. *Petals* 5, imbricate, obcordate, more or less crumpled, uneven at the ends, of a saffron colour, with a dark copper-coloured spot at the base of each, which makes a circle of that colour at the base of the flower. *Stamens* numerous, unequal in length: *filaments* smooth, pale yellow. *Germen* densely tomentose. *Style* smooth, somewhat bent at the base, where it is very slender, club-shaped upwards. *Stigma* capitate, papillose.

The present plant is nearest related to *H. hyssopifolium*, from which it differs in its trailing prostrate stems, dull green and rough, not glossy smooth leaves, which are also much more hairy, and they have quite a different appearance when seen growing together; it is also related to *H. nummularium*; but that is a much more branching plant, with yellow loose-petaled flowers; it may probably be a hybrid production between the two.

The plant from which our drawing was made, was sent to us by Mr. J. Miller, of the Bristol Nursery, with several other sorts that are not common in the neighbourhood of London; it makes a very desirable plant for the ornamenting of rock-work, its flowers being so different in colour from most others, thriving well in a light sandy soil; it also makes a handsome appearance grown in small pots, in a mixture of sandy loam and peat, and will continue to bloom in succession all the Summer, and till late in Autumn, the young shoots as they are produced being generally terminated by a raceme of flowers; it is quite hardy, having stood the whole of last Winter in the open border of our garden without the least protection. Cuttings, taken off in the young wood, and planted under hand-glasses, in July or August, will strike root in a few days.





Hort. Del.

Pub. by J. Ridgway, March 1829.

Wells & Co.

HELIANTHEMUM hyssopifolium *a* crocatum.

Saffron-coloured Hyssop-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. hyssopifolium, caule suffruticoso adscendente, ramis hirsuto-tomentosiusculis, foliis inferioribus ovalibus; superioribus oblongo-lanceolatis; utrinque viridibus planis hirsutis, calycibus hirsutis, petalis imbricatis. *Supra fol. 58. cum synonym.*

a crocatum, floribus ferrugineo-croceis. *Supra 92.*

β cupreum, floribus cupreis. *Supra fol. 58.*

γ multiplex; floribus cupreis plenis. *Supra fol. 72.*

Stem suffrutescent, much branched: *branches* ascending, tomentosely hairy, becoming nearly smooth by age. *Leaves* opposite, flat, green on both sides, the upper side glossy, hairy on both sides, the hairs curved inwards, varying in size and shape, according to the strength of the plant: lower ones nearly round, or of a roundish oval, others oblong, oblongly ovate, or the upper ones lanceolate and more acute. *Petioles* short, flattened on the upper side, hairy. *Stipules* lanceolate, acute, hairy and fringed, bristle-pointed, about twice the length of the petioles. *Racemes* terminal, many-flowered, nodding before expansion, and becoming erect as the flowers expand. *Bractes* lanceolate, acute, hairy, and fringed, shorter than the pedicles. *Pedicles* downy, nodding before the flowers expansion, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, very hairy, the two outer ones small; inner ones ovate, acute, concave inwards, strongly nerved, the nerves tinged with red or purple. *Petals* 5, imbricate, very

broad and rounded, or sometimes a little hollow at the points, or obcordate, of a saffron colour, more or less tinged with a ferruginous tint. *Stamens* numerous, unequal in length: *filaments* smooth, yellow. *Germen* silky. *Style* about the length of the stamens, nearly straight, or very little bent at the base, slender at the base, and thickening upwards. *Stigma* capitate, papillose.

Our drawing of this handsome variety was taken from a plant at the Nursery of Mr. J. Mackay, at Clapton, where it was grown with numerous other species and varieties, in a border at the front of his Greenhouses; in our opinion, it is a more beautiful variety than the copper-coloured one, and is a delightful plant for ornamenting rock-work, or to be grown in a dry border, thriving well in a light sandy soil, or if grown in pots, an equal portion of sandy loam and peat will suit it well; it is pretty hardy, but it will be best to give it a slight covering in severe frost. Young cuttings, planted under hand-glasses in Autumn, strike root readily.

We have this Winter tried a great many species of *Cistus* in various situations in the open ground, and have found them succeed best, and suffer the least from frost, in a border with a north-west aspect; scarcely any of them were injured in the least, though several were of the tenderer sorts, and they had not the least covering or protection; we attribute this to their being in a more dormant state, and their wood therefore more hardened to withstand the frost; as those in a southern aspect, though partially covered, were hurt much worse, which we account for by their being more in a growing state.



W. Hart del.

Printed by T. Agnew, Nov. 20/7.

W. Hart del.

HELIANTHEMUM *hyssopifolium* β *cupreum*.

Copper-coloured Hyssop-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra* fol. 7.

** *Petalis albis, roseis, rubris vel dilute sulphureis.*

H. hyssopifolium, caule suffruticoso adscendente, ramis hirsuto-tomentosiusculis, foliis inferioribus ovalibus; superioribus oblongo-lanceolatis; utrinque viridibus planis hirsutis, calycibus hirsutis, petalis imbricatis.

Helianthemum hyssopifolium. *Ten. synopsis. flor. neap. p. 48. DC. prodr. 1. p. 284.*

α *crocatum*, floribus ferrugineo-croceis.

β *cupreum*, floribus cupreis. *Supra.*

γ *multiplax*, floribus cupreis plenis.

Stem suffruticose, much branched: *branches* ascending, when young densely tomentosely hairy, becoming nearly smooth by age, when they are more or less tinged with purple. *Leaves* flat, green on both sides, the upper side glossy, hairy on both sides, the hairs curved inwards, varying in size according to the strength of the plant: lower ones roundly oval, upper ones narrower, oblongly lanceolate or linearly lanceolate. *Petioles* short, pubescent, slightly furrowed on the upper side, and rounded on the lower. *Stipules* lanceolate, acute, hairy and bristle-pointed, about double the length of the petioles. *Racemes* terminal, nodding before expansion, becoming erect when in bloom. *Bractes* lanceolate, acute, pubescent, shorter than the stipules. *Pedicels* downy, nodding before the flowers expansion, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, very hairy, bearded at the base, the two outer ones very small, lanceolate, acute, erect: inner ones ovate, acute, concave, strongly nerved. *Petals* 5, broadly obovate or

obcordate, very much imbricate, of a reddish copper colour. *Stamens* about 100, unequal in length: *filaments* smooth, pale yellow. *Germen* silky. *Style* about the length of the stamens, nearly straight, slender at the base, and thickening upwards. *Stigma* capitate.

We believe the present very distinct plant belongs to *H. hyssopifolium* of Tenore, as it agrees precisely with his description; we are acquainted with two other very distinct varieties of it, one with flowers of a lighter colour, the other with double flowers; it is one of the strongest growing species of this section, and is a very desirable plant for adorning rock-work, where it makes a grand appearance when covered with its large bright flowers, succeeding well in a light sandy soil; and young cuttings, planted under hand-glasses, in August or September, will strike root readily.

Our drawing was made from a plant at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham.



HELIANTHEMUM *hyssopifolium* γ *multiplex*.

Double-flowered Hyssop-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilute sulphureis.*

H. hyssopifolium, caule suffruticoso adscendente, ramis hirsuto-tomentosiusculis, foliis inferioribus ovalibus; superioribus oblongo-lanceolatis; utrinque viridibus planis hirsutis, calycibus hirsutis, petalis imbricatis. *Supra fol. 58.*

γ *multiplex*, floribus cupreis plenis.

Stem suffruticose, much branched; *branches* ascending, very much knotted or rugged, when young tomentously hairy, but this wears off by age. *Leaves* flat, very hairy, shorter and smaller than in the single varieties: lower ones ovate, bluntish; upper ones narrower, oblongly lanceolate, acute, dark green on the upper side and paler underneath. *Petioles* short, pubescent. *Stipules* about half the length of the leaves, lanceolate, acute, very hairy, fringed and bristle-pointed. *Racemes* terminal, many-flowered, nodding before expansion, afterwards becoming erect. *Bractes* lanceolate, acute, very hairy, shorter than the stipules. *Pedicles* downy, nodding before the flowers expansion, erect or spreading when in bloom, afterwards reflexed. *Calyx* of 5 sepals, very hairy, the two outer ones very small, lanceolate, acute; inner ones ovate, acute, concave, strongly nerved. *Flowers* more or less double or full of petals, copper-coloured, darkest at the base, sometimes making an attempt at another flower in its centre. *Stamens*, many perfect, others are changed into petals. *Germen* and *Style* generally monstrous.

Our drawing of this plant was made at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham. It makes a pretty plant for the adorning of rock-work, producing its fine double flowers, the greater part of the Summer. It may also be grown in small pots, in a mixture of sandy loam and peat; the plants can then be protected by mats, or placed in frames in severe frost. A collection of the different species and varieties of this handsome genus, grown in pots, and placed together, in a clump, make a splendid appearance, when in flower, in the Summer; we scarcely know any tribe of plants that make so gay a show when in bloom; and though the flowers continue but a short time, still the succession that follows, makes that of little or no consequence. The present plant is readily increased, by planting young cuttings under hand-glasses, in August, but the glasses must be removed from them as soon as rooted, or they will be liable to damp.



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W. 7 7 37

Bot. T. P. 1890

J. Hart D.

HELIANTHEMUM mutabile β roseum.

Rose-coloured changeable Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. mutabile, caule suffruticoso, ramis procumbentibus tomentosiusculis, foliis planis ovato-oblongis acutiusculis suprà glabris subtùs levissimè tomentosis pallidè cinereis, stipulis pilosiusculis petiolo subæqualibus vel longioribus, calycibus striatis glabriusculis. *DC. prodr. 1. p. 283.*

Helianthemum mutabile. Pers. syn. 2. p. 79. Willd. enum. 2. p. 571.

Link. enum. 2. p. 77. Spreng. syst. 2. p. 574. Swt. hort. brit. p. 36.

Cistus mutabilis. Jacq. ic. 1. t. 99. Misc. 2. p. 340.

α *album*, floribus albis.

β *roseum*, floribus roseo-rubris minoribus. *Supra.*

Stem suffruticose, much branched : *branches* procumbent, spreading round in all directions, clothed with a thin tomentum. *Leaves* opposite, flat, ovately oblong, scarcely acute, the lower ones roundest and bluntest, the upper side green and glossy, rough, the roughness occasioned by minute tubercles on which the hairs are seated : underneath clothed with a thin grey tomentum. *Petioles* short, hairy. *Stipules* narrowly lanceolate, acute, fringed with longish hairs, lower ones about the length of the petioles, the upper ones about double the length. *Racemes* terminal, several-flowered, nodding before expansion, afterwards becoming erect. *Bractes* lanceolate, fringed with long hairs. *Pedicles* clothed with a thin tomentum, nodding before the flowers expansion, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, the two outer ones very small, oblong, obtuse, spreading, thickly clothed with long hairs : the three inner

ones ovate, concave, scarcely acute, membranaceous, glossy, strongly 4 or 5-nerved, the nerves hairy. *Petals* 5, broadly obovate, distinct or slightly imbricate, pale rose-colour, yellow at the base, dying off nearly white. *Stamens* numerous, about 80: *filaments* long, bright yellow: *pollen* golden yellow. *Germen* clothed with a short dense tomentum. *Style* smooth, about the length of the *Stamens*, nearly straight or slightly bent at the base, thickening upwards. *Stigma* capitate, papillose.

Our drawing of the present pretty plant was taken at the Nursery of Mr. J. Mackay, at Clapton, where it was grown with a fine collection of other species, in a border at the front of the Greenhouses, and made a splendid appearance, when all were covered with bloom.

The present species is a native of Spain, and endures our Winters well in the open ground, except when they are very severe, thriving well in rock-work, or on a dry bank, and producing its flowers all the Summer and till late in Autumn; the flowers are very variable in colour, at first bright rose, then changing to a dull lilac or flesh colour, and at length becoming pale blush, which gives the plant a singular appearance: if the Winters are at any time unusually severe, it will be best to protect it a little with some slight covering, or if some plants are kept in small pots in frames through the Winter, they will be ready to turn out where they may be wanted in Spring; a light sandy soil suits it best; and young cuttings, planted under hand-glasses the latter end of Summer or Autumn, will root readily.





Pub. by J. B. Agnew, Sept. 1887.

W. H. D.

W. H. D.

HELIANTHEMUM roseum.

Rose-coloured Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. roseum, caule suffruticoso decumbente, ramis inferioribus glabris nitidis superioribus tomentoso-incanis, foliis rotundato-ovatis ovato-lanceolatis seu lanceolato-oblongis obtusis margine revolutis subtùs tomentoso-incanis suprà viridibus nitidis subhirsutis, stipulis lanceolato-linearibus ciliatis apice setosis petiolo duplo longioribus, calycibus membranaceis glabris aut angulis subpilosis, petalis basi imbricatis.

Helianthemum roseum. DC. prodr. 1. p. 283. Swt. hort. brit. p. 36.

Cistus roseus. Allion. fl. ped. 2. p. 105. t. 45. f. 4. non Jacquin.

Stem suffruticose, decumbent, spreading in all directions: *branches* ascending, smooth and glossy on the lower part, of a purple colour, the upper part clothed more or less with a white tomentum. *Leaves* opposite, petiolate, variable, obtuse, with revolute margins, underneath clothed with a dense white tomentum, the upper side green and glossy, but slightly hairy, the hairs forked, or two proceeding from one base, pointing in different directions: lower leaves roundly ovate, others ovately lanceolate, the upper ones lanceolately oblong. *Petioles* about half the length of the stipules, flattened and furrowed on the upper side, and rounded on the lower. *Stipules* larger than usual, lanceolately linear, fringed, the points setose. *Racemes* terminal, many flowered, nodding before expansion, afterwards erect. *Bractes* lanceolate, ciliate, the points setose. *Pedicels* clothed with a short canescent tomentum, nodding before the flowers expand, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals; the two outer ones very short, elliptical, fringed: inner ones membranaceous, smooth,

ovate, concave, obtuse, with 3 prominent, more or less purple nerves, which are slightly hairy, with a few hairs also at the points. *Petals* 5, roundly obcordate, slightly crumpled, imbricate, of a pale rose colour, with an orange-coloured spot at the base. *Stamens* from 65 to 70, about the length of the style : *filaments* smooth, bright yellow : *pollen* yellow. *Germen* sericeous. *Style* smooth, slender and bent at the base, and thickening upwards. *Stigma* capitate, papillose.

Our drawing was taken from a plant at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham. It is a native of the South of Europe, and requires a slight covering in severe frosty weather, but will endure our mildest Winters in the open air without the least protection. It thrives well in a light sandy soil, or an equal mixture of light sandy loam and peat will suit it very well. It makes a very pretty plant amongst others for the adorning of rock-work, where it will produce an abundance of flowers nearly all the Summer ; it may also begrown in small pots, which can be protected from the severe frost. Young cuttings, planted under hand-glasses, from July to September, will strike root readily.





HELIANTHEMUM roseum *β. multiplex.*

Double-flowered Rose-coloured Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. roseum, caule suffruticoso subprocumbente tomentosiusculo, foliis ovato-lanceolatis utrinque tomentosiusculis: subtus pallide cinereis, stipulis linearibus, pedicellis calycibusque piloso-subhirsutis. *DC. prodr. 1. p. 283.*

Helianthemum roseum. DC. flor. fr. 4. p. 822. Supra fol. 55.

β. multiplex, foliis latioribus obtusioribus, floribus plenis. *Supra.*

Stems suffruticose, branching, more or less procumbent, ascending, the young branches tomentose. *Leaves* opposite or in threes, ovate or ovately lanceolate, bluntly rounded, the upper ones more acute, clothed with a short tomentum on both sides, the upper side of a greyish hoary colour, underneath more canescent, the margins slightly revolute when young, but becoming flat by age. *Petioles* short, tomentosely hairy. *Stipules* linear, acute, tomentosely hairy, and terminated with a tuft of shortish hairs. *Racemes* terminal, many-flowered, nodding before expansion, afterwards lengthening out and becoming erect. *Bractes* short, lanceolate. *Pedicles* clothed with a short canescent tomentum, nodding. *Calyx* inflated, roundly ovate, tomentose, of 5 sepals: 2 outer ones very small, close pressed to the others: inner ones ovate, bluntish, concave inwards, strongly 4-nerved. *Flowers* monstrous, more or less double, pale rose coloured; when grown in rich soil very large, consisting of many petals. *Stamens* perfect, and numerous in most flowers. *Style* and *Stigma* sometimes perfect, but often imperfect.

This pretty double variety is well worth cultivating, and thrives well in rock-work, or planted in the border of the flower-garden, if in a light soil, and not too moist; it then grows very strong, and attains a good size, making a large bushy tuft; its flowers are also then very large, much larger than those in our figure, which was taken from a plant grown in a pot; it is quite hardy, and continues to bloom nearly all the Summer: young cuttings, planted under hand-glasses in August or September, strike root readily.

Our drawing was made from a plant at the Nursery of Mr. Colvill; we also received it from the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham.





HELIANTHEMUM diversifolium.

Different-leaved Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. diversifolium, caule suffruticoso adscendente ramoso: ramis tomentosiusculis erecto-adscendentibus, foliis petiolatis supra viridibus hirsutis subtus tomentoso-incanis: inferioribus ovalibus oblongisve obtusis planis: superioribus lineari-lanceolatis acutis margine revolutis, stipulis lato-lanceolatis ciliatis petiolo 2-3-plo longioribus, sepalis pilosis, petalis crenulatis distinctis.

Stem suffruticose, rough and rugged, much branched, ascending: *branches* erect or ascending, when young clothed with a thin close-pressed white tomentum, which wears off, and they then become smooth and glossy, and are more or less purple. *Leaves* opposite, very variable, petiolate, green on the upper side, and thickly clothed with short stiff hairs: underneath clothed with a dense white tomentum: lower ones oval, flat, obtuse, others oblong or oblongly lanceolate, the upper ones linearly lanceolate, acute, their margins revolute. *Petioles* short. *Stipules* large, broadly lanceolate, scarcely acute, ciliated with long hairs, two or three times longer than the petioles. *Racemes* terminal, very long, many-flowered, nodding before the expansion of the flowers, afterwards becoming erect. *Bractes* lanceolate, fringed with long hairs, almost as long as the pedicles. *Pedicles* densely tomentose, at first nodding, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, clothed with long spreading hispid hairs, the two outer ones very small, ovately oblong, bluntish, fringed, the inner ones ovate, concave, acute, strongly nerved,

membranaceous between the nerves. *Petals* 5, distinctly spreading, obovate, narrow towards the base, the points notched or crenulate, dark flesh-coloured, with a large copper coloured mark near the base. *Stamens* numerous, about 70: *filaments* straw-coloured: *anthers* and *pollen* golden yellow. *Germen* tomentose. *Style* smooth, twisted, and slender near the base, thickening upwards. *Stigma* capitate, papillose.

The present is a very handsome and showy plant when covered with its brilliant flowers; it belongs to the same tribe as *H. polifolium*, to which it is nearly related, but is readily known at all times by the green upper side of the leaves; those are very variable in form and size, some being nearly round or oval, and obtuse, varying to lanceolate or linear, and more or less acute; the petals are nearly of the same form as *H. polifolium*, and are also notched at the points, but they are of a very different colour: it makes a desirable plant for the ornamenting of rock-work, or to be grown in small pots, succeeding best in a light sandy soil, and is covered with bloom the greater part of the Summer and till late in Autumn; young cuttings, planted under hand-glasses, the latter end of Summer or Autumn, strike root freely.

Our drawing was taken from a plant at the Nursery of Mr. Lee, at Hammersmith, from whose collection we have also obtained a drawing of a double variety of it.





HELIANTHEMUM diversifolium β *multiplex*.

Double-flowered different-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. diversifolium, caule suffruticoso adscendente ramoso: ramis tomentosiusculis erecto-adscendentibus, foliis petiolatis supra viridibus hirsutis subtus tomentoso incanis: inferioribus ovalibus oblongisve obtusis planis: superioribus lineari-lanceolatis acutis margine revolutis, stipulis lato lanceolatis ciliatis petiolo 2-3-plo longioribus, sepalis pilosis, petalis crenulatis distinctis. *Nobis in supra fol. 95.*

α *simpliciflora*, foliis minoribus, floribus simplicibus. *Supra 95.*

β *multiplex*, foliis majoribus, petalis multiplicibus. *Supra 98.*

Lady Gardner's variety. *Hortulanorum.*

Stem suffruticose, rough, hairy, branched, trailing: *branches* ascending or erect, when young clothed with a close-pressed white tomentum, and longer hairs intermixed. *Leaves* opposite, variable, petiolate, hairy, green on the upper side: underneath clothed with a short white dense tomentum, flat, or the margins slightly revolute: lower ones oval or nearly round, obtuse, others oblongly ovate, or oblongly lanceolate, some of the upper ones being nearly linear, acute. *Petioles* short, very hairy. *Stipules* lanceolate, longer than the petioles, bluntish or scarcely acute, very hairy and fringed. *Racemes* terminal, many-flowered, nodding before the flowers expand, then becoming erect. *Bractes* lanceolate, hairy and fringed, acute, at first erect, or the point bent a little inwards, after the flower is expanded they become reflexed or slightly revolute at the point. *Pedicels* densely clothed with a short tomentum, nodding before

the flowers expansion, then becoming erect or nearly so, afterwards reflexed. *Calyx* of 5 sepals, very hairy; the two outer ones very small, linear, obtuse: the three inner ones ovate, concave, scarcely acute, strongly nerved, membranaceous between the nerves. *Flowers* double, of a dark purplish red, consisting of many petals: *outer petals* 5 or 6, obcordate, surrounding the inner ones, that are smaller, and of various forms, and of a lighter purple. *Stamens* numerous, intermixed with the small petals. *Ovarium* and *Style* generally imperfect, their place frequently supplied by small sepal-like leafy appendages.

Our drawing of this handsome double variety was made from a plant at the Nursery of Mr. J. Lee, at Hammersmith, where it is cultivated under the name of Lady Gardner's variety: it is a handsome plant for the decorating of rock-work, or to be grown in a small pot, and will continue to flower nearly all the Summer, growing freely in any light sandy soil; and young cuttings, planted under hand-glasses in August, strike root readily, and soon make nice young plants; some of them should be preserved in frames through the Winter, as they are sometimes injured by severe frost.





J. Hooker del.

Pub by J. Peltgumy 109, Piccadilly Nov 1 1825

J. Walker sc.

HELIANTHEMUM venustum.

Charming Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra, fol. 7.*

** *Petalis albis, roseis, rubris vel dilute sulphureis.*

H. venustum, caule suffruticoso adscendente ramoso; ramis glabris verrucosis apice subtomentosis, foliis oblongo-lanceolatis acutis planis aut margine vix revolutis denticulato-scabris subtus tomentoso-incanis supra viridibus nitidis, stipulis lanceolatis ciliato-hirsutis petiolo duplo longioribus, sepalis internis membranaceis: nervis verrucosis hirsutis, petalis valde imbricatis.

Helianthemum venustum. *Swt. hort. brit. p. 36. n. 78.*

β. flore pleno.

Stem suffruticose, ascending, much branched: *branches* spreading in all directions, ascending, generally purple, smooth and glossy, more or less warted with small brown warts, upper part slightly tomentose. *Leaves* oblongly-lanceolate, acute, some of them flat, others with the margins slightly revolute, rough, or toothed with very small teeth, fringed with short hairs, underneath clothed with a close white tomentum, the upper side green and glossy, but clothed with fascicles of short stellate hairs. *Petioles* short, flattened on the upper side, and rounded on the lower, about half the length of the stipules. *Stipules* lanceolate, fasciculately hairy and ciliate, the points setose. *Racemes* terminal, several flowered, nodding before expansion, afterwards erect. *Bractes* lanceolate, fasciculately hairy and fringed. *Pedicles* short and slender, slightly tomentose, nodding before the flowers expand, erect when in flower, afterwards reflexed. *Calyx* of 5 sepals: the 2 outer ones small, elliptically lanceolate, bluntish, keeled, hairy and fringed, the keel warted; inner ones ovate, concave, acute, membranaceous, strongly 4-

nerved, the nerves warted with purple warts, and fasciculately hairy. *Petals* 5, nearly orbicular, very broad, more or less crumpled, very much imbricate, of a bright crimson inclining to orange, and a yellow spot at the base. *Stamens* about 70, half the length of the style: *filaments* slender, straw-coloured: *pollen* yellow. *Germen* densely tomentose. *Style* long, slender, and crooked at the base, and thickening upwards. *Stigma* capitate, papillose.

This very pretty plant is now very common in the collections about London, but we cannot find any description agree with it in any of the works that we have examined; it is readily distinguished from *H. rhodanthum* by its warted stalks and calyces, and by its smooth and shining stems; its habit is also very different; it is one of the most ornamental plants of the genus for adorning rock-work, as it is quite hardy, and continues to flower all the summer, and till late in autumn; it will also succeed well on a dry bank, or in any common border of the flower garden where it does not get too much moisture; in some of our collections it is considered as a variety of *H. vulgare*, but it has certainly nothing to do with that species, from which it differs more than from any other species in the section; we believe many species have been confused together by the short descriptions that have been given of them, and those chiefly from dry specimens that have dropt their petals. Specimens of this natural order of plants should always be gathered in the morning, as soon as the flowers expand, and before their anthers are burst, for as soon as that takes place, the stigma becomes fertilized by the pollen, and the petals will not remain long after.

Our drawing was taken from a plant, at the Nursery of Mr. Colvill, where it is cultivated in pots of light sandy soil, and makes a splendid appearance all the summer; young cuttings root freely under hand-glasses in the open ground, if planted in autumn.

Over



W. Hart del.

Pub. by J. Ridgway 1798

Pencil by J. P. 118 25. J. W. 22.

HELIANTHEMUM rhodanthum.

Dark rose-coloured Sun-rose.

Sect. IX. EUHELANTHEMUM. *Calyx* ante anthesin apice subtortus, 5-sepalus, sepalis externis sæpè patulis multo minoribus, internis 2 sæpiùs 4-costatis sulcatis margine scariosis intùs nitidis, angulis sæpè pilosis. *Petala* calycibus 2-3-4-plo longiora. *Stamina* numerosa. *Stylus* basi flexus, apice subclavatus. *Stigma* simplex. *Capsula* calyce oblecta trivalvis unilocularis apice dehiscentis. *Semina* pauca extùs convexa, intùs angulosa.—Suffrutices; caules basi ramosi, ramis numerosis erectis vel procumbentibus, sæpiùs adscendentibus. Folia opposita, breviter petiolata, inferiora minora, sæpè margine revoluta stipulata, stipulis lineari-lanceolatis. Racemi terminales secundi simplices, ante anthesin incurvi, post anthesin erecti elongati. Pedicelli basi lateraliter bracteati, ante anthesin cernui, per anthesin erecti, post anthesin recurvi reflexi. DC. prodr. 1. p. 278.

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. rhodanthum, caule suffruticoso procumbente; ramis tomentosisculis subincanis adscendentibus, foliis oblongis margine revolutis; subtùs tomentoso-incanis; suprà viridi-glauculentibus, stipulis subulatis pilosis apice setosis, calycibus breviter tomentosis albidis, petalis imbricatis.

Helianthemum rhodanthum. Dunal. ined. ex DC. prodr. 1. p. 282. Swt. hort. brit. p. 36. n. 76.

Stems numerous, procumbent, very much branched: *branches* ascending, densely clothed with a short white mealy tomentum, that wears off by age. *Leaves* opposite, crossing each other, with short footstalks, oblong or oblongly linear, bluntish, but terminated in a point, margins revolute, of a glaucous green, and slightly pubescent on the upper side; and clothed with a dense white tomentum on the lower. *Petioles* short, canescently pubescent. *Stipules*, one on each side of the leaf, longer than the petioles, subulate, hairy, with bristly points. *Racemes* terminal, several flowered, before flowering curved inwards, after flowering, elongated and erect. *Bractes* short, acute, canescent.

Peduncles thickly clothed with a white pubescence, and some longer hairs intermixed, before flowering cernuous, when in flower erect, after flowering recurved. *Sepals* 5, clothed with a short white tomentum; 2 outer ones very small, ovately-lanceolate, hairy; inner ones ovate, concave, bluntish, membranaceous, strongly 4-ribbed, the ribs more or less hairy. *Petals* 5, more than double the length of the calyx, very much imbricate, rounded, more or less crumpled, of a bright red inclining to crimson, with an orangy tint near the base. *Stamens* numerous, scarcely as long as the style, from 70 to 80: *filaments* slender, smooth, bright yellow; *pollen* yellow. *Germen* clothed with dense wool. *Style* smooth, bent like a bow near the base, the upper part thicker and erect. *Stigma* capitate.

This very handsome flowering plant is a native of Spain, and is one of the most ornamental species for the adorning of rock-work: it is also quite hardy, our drawing being taken from a fine plant, growing luxuriantly with many other handsome species, in the rock-work of the garden belonging to the Apothecaries' Company, at Chelsea, in June last; nothing could make a more brilliant appearance, than the various species of different habits, with flowers of various colours with which the plants were decked every day for about two months; it also makes a handsome appearance when grown in pots, in which it will thrive very well, or on a dry bank in the garden; nothing is more injurious to this family of plants, than too moist a situation in Winter; like most of the species of this genus, the present plant grows freely in a mixture of sandy loam and peat, or any light sandy soil; and young cuttings root readily, if planted under hand-glasses, in a shady situation.



Walden, B.

R. B. by T. H. G. S. S. by M. 17

J. H. H. L. L.

HELIANTHEMUM canescens.

Canescent Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. canescens, caule suffruticoso ramoso diffuso: ramis adscendentibus tomentosiusculis canescentibus, foliis planis aut margine vix revolutis subtus tomentoso-incanis supra viridi-glauciscentibus: inferioribus ovato-oblongis obtusis: superioribus lanceolatis acutis, stipulis linearibus ciliatis petiolo sublongioribus, calycibus glabriusculis nervis pubescentibus, petalis valde imbricatis.
Helianthemum canescens. Swt. hort. brit. p. 36. n. 75.

Stem suffruticose, branching in all directions: *branches* procumbent, their points ascending, thickly clothed with a close pressed canescent tomentum. *Leaves* opposite, variable, flat or sometimes very slightly revolute at the margins, underneath clothed with a dense white tomentum, the upper side of a dull glaucous green, occasioned by a short close pressed pubescence, scarcely perceptible to the naked eye: lower ones ovately oblong, flat, obtuse or rounded at the points: upper ones lanceolate, acute, when young the margins slightly revolute, channelled on the upper side. *Petioles* pubescent, on the lower leaves about the length of the stipules, on the upper ones shorter. *Stipules* linear, acute, pubescent and ciliate, greener than the leaves. *Racemes* terminal, many-flowered. *Bractes* linear, fringed, about half the length of the pedicles. *Pedicles* densely clothed with a close white tomentum, nodding before the flowers expand, scarcely erect when expanded, afterwards reflexed. *Calyx* of 5 sepals, smooth, or scarcely pubescent, 2 outer ones very small, oblongly lanceolate, bluntish, of a brownish purple, inner ones ovate, concave, scarcely acute, membranaceous, strongly four-nerved,

the nerves more or less tinged with purple, and slightly pubescent. *Petals* 5, broader than long, rounded, more or less crumpled, very much imbricate, of a reddish crimson with a small orange-coloured spot at the base. *Stamens* from 60 to 70, about the length of the style: *filaments* smooth, very slender, pale yellow: *pollen* yellow. *Germen* densely tomentose. *Style* much twisted, and very slender at the base, thickening upwards. *Stigma* capitate, granular.

Our drawing of this handsome plant was made at the Nursery of Messrs. Whitley, Brames, and Milne, at Fulham; it is nearly related to *H. rhodanthum*, but is readily distinguished by its canescent leaves and stronger growth: it is also related to *H. roseum* of Jacquin, but we think it can scarcely be the same species, and we have not yet had the opportunity of comparing them. *H. roseum* of Allioni and Decandolle is a very different plant, of which we intend giving a figure in our next Number; the present, we believe, bears the darkest coloured flower, if not the handsomest of the genus; it is also very large for the size of the plant, which is well suited for the ornamenting of rock-work, but will require a little covering in severe frosty weather; it succeeds well in a light sandy soil; and young cuttings, planted under hand-glasses in Autumn, soon strike root.



HELIANTHEMUM virgatum.

Slender-twigged Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. virgatum, caule suffruticoso, ramis virgatis incanis adscendentibus seu erectis, foliis linearibus subtus canescentibus, stipulis lineari-subulatis, calycibus cano-pulverulentis pubescentibus. *DC. prodr.* 1. p. 282. n. 100.

Helianthemum virgatum. *Pers. syn.* 2. p. 79. n. 65. *Spreng. syst.* 2. p. 594. n. 97. *Swt. hort. brit. add.* p. 469. n. 94.

Cistus virgatus. *Desf. flor. atlant.* 1. p. 432.

Stem suffruticose, producing numerous branches, which are at first erect, but as they lengthen out, they become more or less decumbent, not being strong enough to support their weight, their points ascending or becoming again erect, tinged with purple, and clothed with a short white close tomentum, quite white and thick on the young branches, but as they become older it gradually wears off. *Leaves* opposite, linear, acute, canescent on both sides, but most so underneath, channelled on the upper side and strongly one-nerved on the lower, the margins slightly revolute, clothed on both sides with a close-pressed pubescence. *Petioles* clothed with a close-pressed canescent pubescence, flattened a little, and furrowed on the upper side and rounded at the back. *Stipules* linearly subulate, sharp-pointed, keeled at the back, longer than the petioles, thickly clothed with close-pressed white woolly hairs. *Racemes* terminal, several-flowered, nodding before expansion, afterwards ascending, or becoming erect. *Flowers* pale rose-colour, leaning forward, or

slightly nodding. *Pedicles* clothed with a hoary pubescence, nodding before the expansion of the flowers, becoming more erect as they expand, afterwards reflexed. *Bractes* linear, acute, broader than the stipules, about the length of the pedicles. *Calyx* of 5 sepals, hoary and pubescent; two outer ones small, oblong, obtuse, green, with a canescent margin: three inner ones ovate, obtuse, concave inwards, of a thin membranaceous texture, transparent, strongly 3-nerved, the nerves clothed with stiffish hairs. *Petals* 5, broad and rounded, imbricate, the points a little uneven, but scarcely crenulate, pale pink, rather darker at the sides. *Stamens* from 50 to 60: *filaments* slender, smooth, bright yellow, scarcely so long as the style: *pollen* golden yellow. *Capsule* densely tomentose, about the length of the calyx. *Style* very slender at the base, where it is more or less bent, thickening a little upwards. *Stigma* capitate, papillose.

Our drawing of this beautiful species was taken from a fine plant, kindly sent to us from the Nursery of Messrs. Young, at Epsom, the only collection in which we have seen it; it is a native of Barbary, and therefore requires a little protection in Winter, either to be placed in a Frame, or to be covered with mats or straw in severe frost; if planted in rock-work, a covering of straw, or a thick mat will be requisite; but if grown in pots, they can be protected under a common garden frame; a mixture of sandy loam and peat is a proper soil for it; and young cuttings, planted under hand-glasses in August, will strike root readily.



HELIANTHEMUM variegatum.*Variegated-flowered Sun-Rose.*Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. variegatum, caule suffruticoso procumbente: ramis tomentosis subincanis diffuso-procumbentibus, foliis lanceolatis acutis planiusculis: subtus tomentoso-incanis; supra viridis subscabris, stipulis linearibus ciliatis petiolo longioribus, calycibus breviter tomentosis subviolaceis, petalis undulatis.

Helianthemum variegatum. *Swt. hort. brit. add. p. 469. n. 95.*

Stem suffruticose, much branched: *branches* procumbent, spreading in all directions, their points ascending, densely clothed with short white wool. *Leaves* opposite, lanceolate, acute, flat, or the margins sometimes very slightly revolute; underneath clothed with a dense white tomentum, the upper side channelled, of a glossy green, but clothed with a few close pressed procumbent hairs, which gives them a slightly fringed appearance, a little roughened, occasioned by the innumerable small punctures with which the leaf is covered. *Stipules* linear, bluntish, or sometimes acute, fringed with small hairs, a little longer than the petiole. *Racemes* terminal, many-flowered. *Bractes* linear, acute, fringed. *Pedicles* densely tomentose, nodding before the flowers expand, erect or a little declining when in flower, after flowering reflexed. *Calyx* of 5 sepals, clothed with a short thin tomentum: 2 outer sepals small, oblong, bluntish, hairy: inner ones ovate, obtuse, concave, membranaceous, of a violet colour, strongly 4-nerved, the nerves slightly hairy. *Petals* 5, rounded, imbricate, more or less crumpled and undulate, the sides more or less bent inwards, beautifully variegated with white and rose-colour. *Stamens* about

the length of the style, the stigma overtopping them, from 60 to 80 in number: *filaments* smooth, of a bright yellow. *Pollen* yellow. *Germen* densely tomentose. *Style* smooth, a little bent at the base, thickened upwards. *Stigma* capitate, papillose.

Our drawing of this plant was taken at the Apothecaries' Company's Garden at Chelsea, where it is growing in the rock-work in company with many other species; we believe it to be of hybrid origin, and most probably between *H. rhodanthum* and *H. lineare*, which grow in company with it: when in full bloom it makes a very pleasing appearance, from the diversity of colours in its flowers, some being nearly all red, others variegated with dark and light red and white, and some altogether white; it also continues to bloom, if the weather prove favourable, from May till October; this year we observed several flowers on it, the beginning of November. It is quite hardy, having survived several Winters in the rock-work at Chelsea garden, without the least protection. Cuttings of it root freely, planted under hand-glasses in September, the glasses to have a little air at times, to keep them from damping, and the sooner they are potted off after being rooted the better, as they then establish themselves before Winter.





M. Hart. del.

Pub by J. Ridgway 169 Piccadilly 1826

HELANTHEMUM versicolor.

Various coloured Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra*, fol. 7.

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. versicolor, caule fruticoso erecto ramoso: ramis adscendentibus stellato-pubescentibus subincanis, foliis oblongis planis aut supra concavis subtus tomentosq-incanis supra viridis glabris, stipulis oblongo-linearibus ciliato-pilosis apice setosis petiolo sublongioribus, calycibus breviter tomentosis, petalis imbricatis.
Helianthemum versicolor. *Swt. Hort. brit. p. 36. n. 77.*
Chamæcistus luteus imis Serpylli foliis. *Barrel. ic. 440.*

Stems shrubby, erect, from a foot to 18 inches high, much branched: *branches* spreading, ascendant, clothed with a canescent starry pubescence. *Leaves* oblong, or oblongly lanceolate, flat, or the upper side concave, upper side roughish, of a glossy green, underneath clothed with a close white tomentum: lower ones oval or rounded, upper ones narrower and more acute, margins in some of the young leaves a little revolute. *Petioles* short, pubescent. *Stipules* small, oblongly linear, a little longer than the petioles, hairy, ciliate, and terminated with short bristles. *Racemes* terminal, several-flowered, curved inwards before flowering, afterwards becoming erect. *Bractes* oblong, bluntish, hairy and ciliate. *Pedicles* clothed with a loose white pubescence, nodding before the expansion of the flowers, generally erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, clothed with a short canescent pubescence, 2 outer ones very small, spatulate, obtuse; inner ones ovate, concave, membranaceous, strongly 4-nerved, the nerves more or less hairy. *Petals* 4, rounded, much imbricate, more or less crumpled, variable in colour, red, copper-coloured or light flesh-

coloured, with a dark orange-coloured spot at the base. *Stamens* 50 to 60 : *filaments* slender, smooth, bright yellow : *pollen* yellow. *Germen* densely woolly. *Style* smooth, curved round at the base, thickening upwards. *Stigma* capitate, papillose.

A very fine specimen of this handsome plant was growing last Summer in the rock-work of the Garden belonging to the Apothecaries' Company, at Chelsea, where our drawing was made ; it is readily distinguished from all others to which it is related, by its stiff upright growth ; a good representation of it is given in Barrelier's *Icones*, 440 ; but we cannot find it noticed by any modern author, nor do we see any reference to the figure in any work that we have examined ; the flowers in our plant were very variable in colour, scarcely ever two on the plant were alike, some being of a bright red, others nearly yellow, some copper-coloured, others with a mixture of all those colours, and different shades between them, so that the plant when in flower had a curious variegated appearance.

As the present subject is a native of the South of Europe, it cannot bear the severity of our sharpest Winters without protection ; if grown in rock-work, it will require to be covered with mats or dry litter in severe weather, but in mild weather will be best uncovered ; it may also be grown in pots, where the plants will bloom well, and can be placed with the other species in frames or pits in severe frosty weather ; like the rest of the tribe, the present plant will succeed well in a light sandy soil, or a mixture of turfy loam, peat, and sand, will suit it very well. Cuttings strike root freely, if planted under hand-glasses, the latter end of Summer, or Autumn.



HELIANTHEMUM racemosum.

Long racemed Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. racemosum, caule fruticoso ramoso, ramis erectis teretibus tomentoso-incanis, foliis petiolatis linearibus vel lineari-lanceolatis margine revolutis supra nitidis subtus incanis, stipulis subulatis in ramis floriferis petiolo longioribus, pedicellis incanis, calycibus nervoso-sulcatis violaceo-rufescentibus.

Helianthemum racemosum. *Dunal in DC. prodr. 1. p. 281. Spreng. syst. 2. p. 593.*

Cistus racemosus. *Linn. mant. 76? Lam. dict. 2. p. 25. Vahl symb. 1. p. 39. Willden. sp. pl. 2. p. 1208. exclus. syn. Cavan. et Barrel.*

Stem frutescent, much branched, clothed with a brown roughish bark, and marked with rings, where the leaves have fallen: *branches* erect, cylindrical, clothed with a close-pressed hoary woolliness. *Leaves* opposite, petiolate, linear, oblongly or lanceolately linear, acute, channelled on the upper side, the margins revolute: upper side of a bright shining green, quite smooth on the old leaves, but slightly pubescent when young; underneath pennately veined, and clothed with a short thinnish grey woolliness. *Petioles* clothed with a short dense tomentum, flattened a little on the upper side and rounded below, longest on the young Autumn shoots. *Stipules* attached to the base of the petioles, subulate, ciliate, the hairs pointing upwards: those on the flowering shoots longer than the petioles; but on the young Autumn shoots considerably shorter than the petioles. *Racemes* terminal, very long, clothed with a short dense woolliness, drooping or involute before the expansion of the flowers, afterwards lengthening out

and becoming erect. *Bractes* fringed, similar to the upper stipules. *Pedicles* longer than the bractes, densely clothed with a short grey tomentum. *Calyx* of 5 sepals; the two outer ones small, bluntish, hairy, dark green; the three inner ones ovate, acute, concave, membranaceous between the angles, the angles marked with red or violet colour, smooth and glossy, slightly hairy. *Petals* 5, imbricate, white, more or less uneven or crenulate at the edges, roundly obovate. *Stamens* numerous: *filaments* smooth, yellow: *pollen* orange-coloured. *Style* twisted at the base. *Stigma* large, capitate, papillose.

We also received the present handsome species from Mr. Miller, of the Bristol Nursery, at the same time as the subject of the last plate; it is a scarce plant in our collections, we having never seen it in any of the Nurseries about London; it is readily distinguished from all others to which it is related, by its upright growth and glossy leaves, and the red veins of the calyx; it must not be confounded with *Cistus racemosus* of Cavanilles, which is a variety of *H. lavandulæfolium*, according to Dunal in Decandolle's Prodrômus, and is a yellow-flowered species.

The present species is a native of Spain, Barbary, and the Canary Islands, and will stand our Winters, if not very severe, in the open ground; it is well adapted for ornamenting rock-work, from its handsome glossy foliage; its flowers are also produced in succession nearly all the Summer and till late in Autumn, thriving best in a light sandy soil; it is also best to have some plants of it in pots, as those can be preserved in frames through the Winter, and can be planted out in Spring, to supply the places of any that may have been killed by frost: young cuttings, planted under hand-glasses, any time from July to September, will strike root readily.





HELIANTHEMUM pilosum.

Hairy Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. pilosum, caule suberecto fruticoso ramoso; ramis elongatis gracilibus verrucosis, foliis petiolatis linearibus inargine revolutis subtus tomentoso-incanis: supra cano-virescentibus apice setosis, stipulis lineari-subulatis petiolo longioribus, racemis laxis paucifloris, calycibus striatis pilosiusculis, nervis subviolaceis, petalis imbricatis.

Helianthemum pilosum. *Pers. syn. 2. p. 79. DC. prodr. 1. p. 282. Swt. hort. brit. p. 35.*

Stem shrubby, nearly erect, or ascending, branched: *branches* long and slender, erect or ascending, smooth and glossy, or slightly hairy, of a purple colour, more or less warted. *Leaves* petiolate, linear, bluntish, bristle-pointed, more or less hairy, margins much revolute, deeply channelled on the upper side, of a whitish green, occasioned by a dense minute pubescence, underneath clothed with a dense white tomentum. *Petioles* short, pubescent. *Stipules* linear, bluntish, fringed with short hairs, longer than the petioles. *Racemes* lax, 3 to 8-flowered, clothed with a short white tomentum. *Bractes* linear, fringed, similar to the stipules. *Peduncles* slender, tomentose, nodding before the flowers expand, scarcely erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, more or less hairy, thinly clothed with a white tomentum: 2 outer sepals very small and narrow, concave, bluntish; inner ones membranaceous, ovate, concave, bluntish, 3-nerved, nerves prominent, violet coloured. *Petals* 5, much imbricate, nearly orbicular, more or less crumpled, of a paper white, stained with yellow at the base. *Stamens* from 60 to 70, scarcely as long as the style: *filaments* slender, smooth, pale

yellow: *anthers* attached by their back to the filaments: *pollen* bright yellow. *Germen* densely tomentose. *Style* smooth, twisted at the base, a little longer than the stamens. *Stigma* capitate, granularly fimbriate.

The present plant is nearly related to *H. lineare*, and also to *H. apenninum*; from the former it differs in its much whiter leaves, and in being more hairy; and from both by its imbricate paper-white petals; it is a very pretty plant for the adorning of rock-work, and continues in flower a great part of the Summer; it is also pretty hardy, standing our milder Winters in the open air without protection; but it is sometimes injured in the more severe ones; so that it is the safest way to have a few plants in pots, to be protected in frames, or to be covered with mats in sharp frosty weather. It succeeds well in any light sandy soil, or a mixture of sandy loam and peat will suit it very well; and young cuttings, planted under hand-glasses in Autumn, strike root readily. Our drawing was made from a plant at the Nursery of Messrs. Whitley, Brames, and Milne, last Summer.



HELIANTHEMUM lineare.

Linear-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilute sulphureis.*

H. lineare, caule suffruticoso, ramis elongatis adscendentibus subtomentoso-incanis, foliis linearibus obtusiusculis subtus canescentibus margine revolutis, stipulis lineari-subulatis petiolo brevioribus, racemis laxis virgatis paucifloris, calycibus striatis glabriusculis; nervis subviolaceis, sepalis acutis, petalis subdistinctis.

Helianthemum lineare. *Persoon. synops.* 2. p. 78. n. 4. *DC. prodr.* 1. p. 282. n. 99. *Swt. hort. brit. add.* p. 469. n. 93. *Spreng. syst.* v. 2. p. 593. n. 95.

Cistus linearis. *Cavan. ic.* 3. p. 8. t. 16.

Stem shrubby, much branched, clothed with a brown glossy bark: *branches* ascending, crooked, very long and slender, the young ones clothed with a hoary tomentum, which wears off by age. *Leaves* linear, bluntish, opposite, with a longish slender petiole, the margins more or less revolute, underneath clothed with a hoary tomentum, and having a strong prominent midrib, the upper side when young clothed with short close-pressed hairs, which gives them at that time a hoary appearance; this wears off when older, and they are then green and a little glossy. *Petioles* pubescent. *Stipules* small, linearly subulate, more or less hairy, shorter than the petioles. *Racemes* terminal, loose, few-flowered, clothed with a hoary tomentum, before flowering curved inward, but as the flowers expand becoming erect. *Bractes* short, lanceolate or linear, clothed with short hairs. *Pedicles* clothed with a short hoary tomentum, nodding before flowering, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals, smoothish or slightly hairy, the two outer ones very small; inner ones ovate, acute, concave, striate, the

nerves prominent, more or less tinged with red. *Petals* 5, white, obovate or obcordate, slightly imbricate at the base, but distinct upwards. *Stamens* from 30 to 40. *Style* curved. *Stigma* capitate. *Capsule* roughish. *Seed* brown, margined with a white membranaceous wing.

This pretty little shrub is a native of the South of Europe, and is well adapted for rock-work, but it requires a little covering in Winter, and it is best to have some plants of it in pots, and those preserved in frames in severe weather, to supply the places of any that may be killed by the severity of the weather; they succeed well in a light sandy soil, or a mixture of sandy loam and peat will suit them very well. Cuttings, planted under hand-glasses in Autumn, will soon strike root; they may also be raised from seeds, which ripen occasionally.



HELIANTHEMUM apenninum.

Apennine Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilute sulphureis.*

H. apenninum, caule suffruticoso ramoso, ramis patulis cano-tomentosiusculis, foliis petiolatis oblongo-linearibus margine vix revolutis subtus tomentosus: suprà glaucescentibus demùm glabris, stipulis subulatis petiolo longioribus, calycibus brevissimè villosis striatis glauco-cinereis obtusiusculis. *DC. prodr.* 1. p. 282.

Helianthemum apenninum. *DC. fl. fr.* 4. p. 824. *Swt. hort. brit.* p. 35.

Stem suffruticose, very much branched, the branches spreading or ascending, clothed with a short white tomentum. *Leaves* petioled, oblongly linear, scarcely acute, slightly glaucous on the upper side, becoming smooth and glossy by age, clothed underneath with a short dense white tomentum, the margins very slightly revolute. *Petioles* short, tomentose. *Stipules* subulate, longer than the petioles. *Racemes* terminal, several-flowered, nodding before expansion, erect when in bloom. *Flowers* of a paper white. *Pedicles* slender, clothed with a white tomentum. *Calyx* of 5 sepals, which are clothed with very short woolly hairs; the two outer sepals very small, linear, obtuse, 3 inner ones ovate, obtuse, concave, striate, more or less tinged with purple. *Petals* 5, distinctly spreading, of a very thin texture, paper-white, with a small yellow spot at the base, more or less crumpled. *Stamens* from 40 to 50, spreading, shorter than the style: *filaments* smooth, yellow. *Germen* densely tomentose. *Style* bent near the base, thickening upwards. *Stigma* large, capitate, papillose.

Our drawing of this plant was made last Summer at the Nursery of Mr. Colvill, where it was raised from seed received from the late Mr. Schleicher, of Bex, in Switzerland; we also received plants of it from Mr. W. Anderson, at the Apothecaries' Company's Garden, at Chelsea; it makes a pretty plant for the adorning of rock-work, where it will succeed well without the least protection; young cuttings, planted under hand-glasses in Autumn, will strike root readily, or it may be increased by seeds.



*J. Hart Del.**Red. by J. Ridgway Jan 1829.**Widdell sc.*

HELIANTHEMUM polifolium.

White Mountain Sun-Rose.

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. polifolium, caule suffruticoso ramoso; ramis procumbentibus dense tomentosis, foliis oblongo-linearibus margine revolutis utrinque tomentoso-incanis, stipulis angusto-linearibus obtusis petiolo longioribus bracteisque tomentosis ciliatis, calycibus tomentosis, petalis distinctis subcrenulatis.

Helianthemum polifolium. *Pers. syn.* 2. p. 80. *Swt. hort. brit.* p. 36. n. 79.

Cistus polifolius. *Linn. spec.* 745. *Smith Flor. brit.* 576. *Eng. bot.* 1322. *Comp. flor. brit. edit.* 2. p. 95. *Hudson.* 234. *Withering* 492. *Hull* 118. *Dill. elth.* 175. t. 145. f. 172.

Stem suffrutescent, much branched; *branches* procumbent, the points more or less ascending, thickly clothed with a dense white tomentum. *Leaves* opposite, oblongly linear, bluntish, or scarcely acute, the margins revolute, thickly clothed on both sides with a hoary white tomentum, so that they are of a greyish white on both sides, but whitest underneath. *Petioles* short, also densely woolly. *Stipules* narrowly linear, blunt, a little longer than the petioles, woolly and fringed. *Racemes* terminal, many-flowered, nodding, and the points incurved before expansion, afterwards becoming erect. *Flowers* white, nodding before expansion, erect when in bloom, afterwards reflexed. *Bractes* similar to the stipules, shorter than the pedicles, densely woolly. *Pedicles* slender, woolly. *Calyx* of 5 sepals, densely clothed with a short tomentum, the two outer ones very small, narrowly linear, bluntish; inner ones broadly ovate, obtuse, concave inwards. *Corolla* of 5

petals, distinctly spreading, obovate, generally crenulate at the margins. *Stamens* numerous, unequal in length: *filaments* smooth, yellow: *pollen* orange-coloured. *Germen* clothed with a dense tomentum. *Style* smooth, slender, and bent near the bottom, thickening upwards. *Stigma* capitate, papillose.

The present pretty species is a native of various parts of Devonshire and Somersetshire, but it is certainly not the *H. polifolium* of the continental Botanists, as they describe its leaves with a green and glossy upper side, and the calyx as smooth and glossy; our plant is altogether hoary all over, and the calyx densely clothed with a short, close, white tomentum; that it is the original plant of Dillenius, there can be no doubt, as we have specimens from the same place as he obtained those from which his figure was made; we received our's from Mr. W. Christy, Junior, of Clapham-road, who gathered them himself on Brent-down, in Somersetshire, and kindly sent them to us; we are also much obliged to Mr. Thomas Clark, Junior, of Bridgewater, who was so kind as to send us seeds from the same place, which were raised at Mr. Colvill's Nursery, but by some means got lost, before they flowered.

Our drawing was made from a plant in the garden of Mr. Capper, at Clapton, that had been received from Babbicombe, near Newton Abbott; we have compared the specimens with the Brent-down ones, and there is not the slightest difference in them. It is also abundant on Tor Hill, near Torquay, as we have been informed by Miss Southcote, an intelligent botanical lady of that place.

The plant that we believe to be *H. polifolium* of the continental Botanists, we possess a drawing of; it agrees precisely with their descriptions, and we intend to publish it in our next Number.

The present species is quite hardy, and well adapted for rock-work; it thrives well in a light sandy soil; and cuttings, planted under hand-glasses, root readily. The figure in English Botany is not good, nor well coloured; the leaves are much too green.





Wiedell's

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Herb. Bot.

HELIANTHEMUM pulverulentum.

Powdered Sun-Rose.

Sect. IX. EUHELIANTHEMUM. *Supra, fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. pulverulentum, caule suffruticoso ramosissimo prostrato: ramis incano-tomentosiusculis, foliis oblongo-linearibus margine revolutis obtusis subtus incanis supra glaucis, stipulis subulatis ciliatis apice setosis petiolo longioribus, calycibus canescentibus minute tomentoso-pubescentibus, petalis valde imbricatis.

Helianthemum pulverulentum. DC. *fl. fr.* 4. p. 823. *Prodr.* 1. p. 282. *Pers. syn.* 2. p. 80. *Swt. hort. brit.* p. 36. n. 74.

Cistus pulverulentus. *Pourr. act. toul.* 3. p. 311.

Stems suffruticose, prostrate, very much branched, and spreading in all directions: *branches* opposite, densely clothed with a close-pressed white tomentum.

Leaves opposite, oblongly linear, obtuse, margins revolute, underneath clothed with a close white tomentum, the upper side of a glaucous powdery appearance, originating from small close-pressed white hairs, with which the upper surface is covered, and is more conspicuous on the young leaves. *Petioles* short, tomentose and hairy. *Stipules* subulately linear, longer than the petioles, hairy and ciliate, bristly at the point. *Racemes* terminal, several flowered. *Bractes* linear, bluntish, hairy and ciliate, more than half the length of the peduncles. *Peduncles* clothed with a dense white pubescence and hairs intermixed, nodding before the flowers expand, and often when in flower, afterwards reflexed. *Calyx* of 5 sepals, the 2 outer ones small, oblong, bluntish, very hairy: inner ones ovate, concave, bluntish, strongly 4-nerved, the nerves clothed with short rigid hairs, and between them with a short white close pubescence. *Petals* 5, much imbricate and

crumpled, roundly obcordate, white with a small yellow spot at the base, and tinged round with a sulphur colour. *Stamens* from 60 to 70, about the length of the style; *filaments* slender, yellow: *pollen* yellow. *Ger-men* clothed with a close-pressed pubescence. *Style* curved, smooth, thickening upwards. *Stigma* capitate, tuberculate.

Our drawing of this species was taken from a fine strong plant growing in the rock-work of the Garden belonging to the Apothecaries' Company at Chelsea, in June last: it is very hardy, as it stood the last Winter quite well, without the least protection; it is readily distinguished from all those to which it is nearest related, by its white blunt leaves, and its very much imbricated thin flaccid petals; we do not know any one with which it can be confounded, but is nearer related to *H. apenninum* than any other. Its flowers are not so showy as some of the other species; but they nevertheless make a pleasing variety; and in a large piece of rock-work, where a great many species are planted, we think the beauty depends very much on the different sorts of colours being properly mixed; and we often see too many plants of a fine thing grown together, which very much diminishes both its beauty and rarity, particularly when there are not some less beautiful to compare with it.

The present plant will grow freely in any common garden soil, and will thrive in any situation that is not too moist; it may also be grown in a pot, in a light sandy soil, and will need no protection in Winter. Cuttings planted under hand-glasses in Autumn, strike root readily.



HELIANTHEMUM confusum.*Confused Sun-Rose.*

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.*** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. confusum, caule suffruticoso, ramis procumbentibus glabriusculis apice subtomentosis, foliis oblongis ovatis obtusiusculis subplanis subtùs tomentoso-incanis suprà glabris viridibus, stipulis bracteisque linearibus viridibus ciliatis, calycibus striatis glabriusculis subnitidis. *DC. prodr. 1. p. 283. sub H. polifolio.*

Stem suffrutescent, procumbent, extending to a considerable distance, branched : *branches* procumbent, the points ascending, smooth when old, but clothed with a white tomentum while young, so that the lower part is smooth, and the upper part tomentose. *Leaves* ovate or oblong, bluntish, the lower ones shorter and rounder, flat or nearly so, underneath clothed with a short white tomentum, the upper side green, and somewhat glossy, but more or less clothed with shortish hairs ; these are most conspicuous on the young leaves, as they wear off as the leaves become older. *Petioles* short, flattened a little on the upper side, pubescent on the young leaves. *Stipules* linear, acute, longer than the petioles, somewhat hairy and fringed, of a bright green colour. *Racemes* terminal, elongated, several-flowered, nodding before expansion, but becoming erect as the flowers expand. *Bractes* green, fringed, similar to the stipules, shorter than the pedicles. *Pedicles* tomentose, drooping before expansion, erect when in bloom, afterwards reflexed. *Flowers* white and delicate. *Calyx* of 5 sepals ; the two outer ones small, bluntish, dark green, hairy and fringed ; the three inner ones ovate,

concave inwards, bluntish, with membranaceous inner margins, striated with dark green veins, somewhat hairy but glossy. *Petals* 5, more or less imbricate, or somewhat distinct, rounded but uneven at the margins. *Stamens* numerous, spreading, unequal in length: *filaments* pale yellow: *pollen* golden yellow. *Style* about the length of the stamens, curled round at the base, slender below and thickening upwards. *Stigma* capitate, papillose.

The present plant is the one generally cultivated in the Nurseries as *H. polifolium*, and we believe the plant intended by most of the continental botanists, judging from their descriptions; but it has certainly nothing to do with the the English plant, though it is not very unlike the figure in English Botany, the leaves of which are coloured much too green, if it really was taken from a native specimen, as there asserted; the present is a common plant in the Nurseries about London, and is well suited for the ornamenting of rock-work, as it is quite hardy, thriving well in a light sandy soil; and young cuttings, planted under hand-glasses in Spring and Autumn, strike root readily.

Our drawing was made, several years ago, at the Nursery of Mr. Colvill; but we deferred publishing it, till we should have an opportunity of comparing it with the wild English species. We showed our drawing to Mr. Lagasca some time since, who immediately pronounced it to be the Spanish *H. polifolium*.

100.



M. Hart-Del.

Pub. by J. Radway, July 1892

Widdell, Jr.

HELIANTHEMUM lanceolatum.

Spear-leaved Sun-Rose.

Sect. IX. EUHELANTHEMUM. *Supra fol. 7.*

** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. lanceolatum, caule suffruticoso ramosissimo procumbente; ramis adscendentibus glabriusculis apice tomentoso-incanis, foliis lanceolatis acutis margine subrevolutis supra viridis glabriusculis subtus tomentoso-incanis, stipulis subulato-linearibus petiolo longioribus, sepalis glabriusculis subpilosis, petalis imbricatis.

Stem suffrutescent, procumbent, very much branching: *branches* ascending or erect, clothed when young with a close white down, this wears off by age, and they then become smooth. *Leaves* opposite, petiolate, lanceolate, acute, slightly revolute at the margins, green and rather glossy on the upper side, but clothed with short hairs, most abundant on the young leaves, underneath clothed with a short white tomentum. *Petioles* short, flattened a little on the upper side, hairy. *Stipules* about twice the length of the petioles, linearly subulate, hairy and fringed. *Racemes* terminal, many-flowered, nodding and involute before the flowers expand, but becoming erect as they come into bloom; the flower-stem thickly clothed with white down. *Bractes* linearly lanceolate, acute, hairy and fringed, nearly as long as the pedicles, and sometimes exceeding some of them in length. *Pedicles* densely tomentose, drooping before the flowers expand, erect when in bloom, afterwards reflexed. *Calyx* inflated, of 5 sepals, the two outer ones very small, bluntish, of a dark green: inner ones short, ovate, concave, blunt, 3 to 5-veined or striate, somewhat glossy

but clothed with shortish hairs. *Petals* 5, white, imbricate at the margins, broadly rounded, somewhat crumpled, narrowing to the base, a little uneven at the margins, marked with yellow at the base. *Stamens* numerous: *filaments* smooth, slender, pale yellow: *pollen* orange-coloured. *Style* very slender, and curled round at the base, thickening upwards, where it becomes club-shaped. *Stigma* capitate, papillose.

We believe the present plant to be one of those that has been confused with *H. polifolium* by some Botanists, as we have seen it by that name in several collections; but it is a very different plant, readily distinguished by its sharp pointed leaves, which are of a glossy green on the upper side, and by its broad imbricated petals.

Our drawing was made from a plant growing in the rock-work, in the garden belonging to the Apothecaries' Company, at Chelsea, where it was raised by Mr. W. Anderson, from seeds that he received from the Continent, under the name of *H. polifolium*; it is quite hardy, remaining all the Winter uninjured without any protection, succeeding well in a light sandy soil; and young cuttings, planted under hand-glasses, the latter end of Summer or Autumn, strike root freely.



HELIANTHEMUM macranthon.*Great-flowered Sun-Rose.*

Sect. IX. EUHELIA NTHEMUM. *Supra fol. 7.******* *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. macranthon, caule suffruticoso, ramis procumbentibus tomentosisculis, foliis planis ovato-oblongis acutiusculis suprà glabris subtùs levissimè tomentosis pallidè cinereis, stipulis pilosiusculis petiolo subæqualibus vel longioribus, calycibus striatis pilosis, petalis distinctis.

Stem suffruticose, much branched : *branches* procumbent, clothed with a thin tomentum, the upper part tinged with purple. *Leaves* large and flat, ovately oblong, obtuse, or scarcely acute, the upper side green, smooth, and glossy, or very thinly clothed with hairs, which are mostly in pairs, underneath clothed with a short thin tomentum, besides numerous little bunches of hairs which give a greyish appearance, the hairs are fixed on minute tubercles which occasions a roughness. *Petioles* hairy, furrowed on the upper side and rounded on the lower. *Stipules* narrowly lanceolate, acute, fringed with long hairs : lower ones about the length of the petioles : upper ones double the length. *Racemes* terminal, nodding before expansion, afterwards becoming erect and lengthening out. *Bractes* lanceolate, slightly falcate, fringed with long hairs. *Pedicles* clothed with a thin tomentum and some longer hairs intermixed, tinged with purple, nodding before the flowers expand, erect when in bloom, afterwards reflexed. *Calyx* of 5 sepals ; the two outer ones small, oblongly lanceolate, spreading, and fringed with long hairs ; the three inner

ones ovate, membranaceous, concave, acute, strongly 3-nerved, the nerves very prominent, and clothed with bunches of long hairs which are seated on little tubercles; between the nerves smooth and glossy. *Petals* 5, distinctly spreading, of a cream-coloured white, pale yellow near the base, obovately wedge-shaped, very slender at the base, slightly crenulate at the ends. *Stamens* about 80: *filaments* long, smooth, bright yellow: *pollen* yellow. *Germs* densely tomentose. *Style* smooth, a little bent and slender at the base, thickening upwards, about the length of the stamens. *Stigma* large, capitate, papillose.

Our drawing of the present strong growing and large flowered species, was taken from a plant at the Nursery of Mr. J. Lee, at Hammersmith, where it was cultivated in pots, and also in the open ground; it is of rather a loose straggling growth, producing long shoots that spread out on the ground, but its flowers are very large and showy; it is also quite hardy; and the best situation for it is rock-work, where it will grow more compact, by being in a dry exposed situation, than it will if planted in rich soil in the flower-borders: young cuttings of it strike root readily if planted under hand-glasses, any time from July to the end of September; it is nearer related to *H. mutabile* than to any other species.



HELIANTHEMUM *macranthos* β *multiplax*.*Double great-flowered Sun-Rose.*Sect. IX. EUHELIANTHEMUM. *Supra* fol. 7.** *Petalis albis, roseis, rubris vel dilutè sulphureis.*

H. macranthos, caule suffruticoso, ramis procumbentibus tomentosisculis, foliis planis ovato-oblongis acutiusculis suprà glabris subtùs levissimè tomentosis pallidè cinereis, stipulis pilosiusculis petiolo subæqualibus vel longioribus, calycibus striatis pilosis, petalis distinctis. *Supra* fol. 103.

α *simplex*, foliis majoribus, floribus simplicibus. *Supra* t. 103.

β *multiplax*, foliis inferioribus subrotundis, floribus plenis. *Supra*.

Stem suffrutescent, much branched: *branches* procumbent, clothed with a thin tomentum, which in time wears off, they then become smooth. *Leaves* flat; lower ones nearly round, or of a roundish oval, obtuse; the upper ones ovately oblong, more acute, the upper side green and glossy, but hairy; underneath clothed with a thin white tomentum, besides some bunches of hairs, which give a greyish appearance; the hairs fixed on minute tubercles, which occasions a roughness. *Petioles* short, hairy, furrowed on the upper side and rounded on the lower. *Stipules* linearly lanceolate, acute, fringed with long hairs, lower ones about the length of the petioles, upper ones about twice their length. *Racemes* terminal, several-flowered, nodding before expansion, afterwards lengthening out and becoming erect. *Bractes* lanceolate, somewhat falcate, fringed with long hairs. *Pedicles* clothed with a thin tomentum and longer hairs intermixed, nodding before the flowers expand, nearly erect when in bloom. *Calyx* of 5 sepals; the two outer

ones small, oblongly lanceolate, spreading, and fringed : the three inner ones ovate, concave, membranaceous, acute, strongly 3-nerved, the nerves very prominent, and clothed with bunches of hairs, that are seated on little tubercles. *Flowers* white, very double, a great number of the stamens being turned into petals.

Our drawing of this pretty double variety, was taken from a plant at the Nursery of Mr. J. Lee, at Hammersmith ; it is quite as hardy as the single variety, and is well adapted for growing in rock-work, or in small pots, mixed with the other species ; by cutting off the flower-stems as soon as the flowers are dropped, will increase the strength of the young shoots, and occasion them to push out other racemes of flowers in succession ; so as to continue in bloom the greater part of the Summer : young cuttings, planted under hand-glasses in Spring or Autumn, will strike root readily.



HUDSONIA ericoides.

Heath-like Hudsonia.

HUDSONIA. *Calyx* tubulosus 5-partitus : segmentis 2 externis minutis. *Petala* 5. *Stamina* 9-30 : filamenta filiformia ; antheræ parvulæ, bilobæ, longitudinaliter dehiscentes. *Stylus* suberectus simplex staminibus æqualis. *Stigma* simplex. *Capsula* 1-locularis, 3-valvis, 1-3 sperma, oblonga vel obovata, coriacea, lævis vel pubescens. *Semina* granulata. *Embryo* in albumine corneo immersus.—*Suffrutices parvi, sæpiùs cæspitosi.* *Folia alterna, parvula, subulata, acerosa, imbricata, exstipulata.* *Flores subsessiles vel pedunculati ; pedunculi uniflori, solitarii terminalesque vel lateraliter aggregati.* DC. prodr. 1. p. 284. nonnullis mutatis.

H. ericoides, pubescens, caule suffruticoso suberecto : ramis elongatis, foliis filiformibus subulatis subimbricatis, pedunculis lateraliter è gemmis foliaceis solitariis, calycibus cylindricis obtusis, capsulis pubescentibus semper monospermis, valvulis oblongis. DC. prodr. 1. p. 285.

Hudsonia ericoides. Linn. mant. 74. Lam. ill. t. 407. Willd. sp. pl. 2. p. 858. Hort. berol. t. 15. Pers. syn. 2. p. 6. Pursh fl. amer. sept. 2. p. 364. Hort. Kew. ed. 2. v. 3. p. 146, 147. Nuttall gen. amer. 2. p. 4 ?

A short densely branched suffruticose plant, from a span to near a foot in height ; *branches* erect, elongated, thickly clothed with leaves, and densely crowded together. *Leaves*, like some species of Heaths, subulately linear, more or less imbricate, becoming more patent as they advance in age, and remaining persistent for 2 or 3 years ; thickly clothed with spreading white hairs, as is every other part of the plant, except the corolla ; this gives the whole plant a sort of hoary appearance. *Peduncles* solitary, one-flowered, each proceeding from the side of one of the gemmæ, or little tufts of leaves, with which the branches are crowded, and some of which afterwards lengthen out into shoots ; when the flowers first expand, the peduncles are very short, but

they continue to lengthen as the capsule is coming to perfection, until they are from 5 to 8 lines in length; more or less tinged with brown, as is the calyx. *Calyx* tubular, 5-parted: segments very unequal, the three inner ones more than double the size of the other two, and obtuse, the two outer ones very narrow, and acute. *Petals* 5, distinctly spreading, of a bright but pale yellow, obovately ovate. *Stamens* from 9 to 15, spreading when the flower first expands, afterwards closing round the style: *filaments* unequal in length, smooth, pale yellow, about the length of the style: *anthers* small, 2-lobed, the lobes distant and distinct, opening longitudinally: *pollen* golden yellow. *Germen* downy. *Style* erect, or slightly bent, smooth. *Stigma* simple, very small.

This elegant little plant is at present very scarce in our collections, owing to its being supposed to be very difficult of cultivation; but our present subject thrives very well, and grows quite luxuriant in a pot of sandy peat soil; and would, we expect, still grow more luxuriant, if planted out in a bed of sandy peat, in rather a shady situation, as it is said to cover large tracts of ground in America, in the sandy Pine woods, in the same manner as the common heath in England.

H. ericoides of Nuttall, is, as M. Decandolle observes, most probably quite a different species from the present plant, as he describes the flowers as growing in fascicles, and the present only produces them singly. Young cuttings, planted under hand-glasses in sandy peat soil in the open air, in August or September, will strike root, if the glasses are occasionally taken off to dry them, that they may not damp.

Our drawing was taken from a plant, procured for us in flower by Mr. G. Charlwood, in July last.



HUDSONIA tomentosa.

Tomentose Hudsonia.

H. tomentosa, caespitosa et incano-tomentosa, caulibus intricatis densis, foliis minutis densè imbricatis ovato-acutis, floribus aggregatis subsessilibus, calycibus subcylindricis partitionibus obtusis, capsulis monospermis, valvis ovatis laevibus. *DC. prodr.* 1. p. 285. *Hudsonia tomentosa.* *Nutt. gen.* 2. p. 5. *Spreng. syst.* 2. p. 452. *Swt. hort. brit. add.* p. 469.

A short, densely tufted suffruticose plant, about a span high: *branches* short, crowded, ascending, densely tomentose, and thickly clothed with leaves, which are persistent, and remain on long after they are turned brown, so that the branches are always crowded with them. *Leaves* crowded, minute, scarcely a line in length, closely imbricated, oblong or ovate, acute, densely clothed with a white silky tomentum, which gives the plant a sort of silvery appearance. *Flowers* small, of a pale bright yellow, sessile or on very short footstalks, each seated on one of the little gemmæ, or small tufts of leaves with which the branches are crowded, so that when they are expanded they appear in clusters. *Calyx* cylindrical, 5-cleft, clothed with a silky tomentum, the segments obtuse, two of them much smaller than the others. *Petals* 5, distinctly spreading, obovate, concave, longitudinally lined. *Stamens* from 10 to 18; *filaments* slender, smooth, longer than the style, but scarcely so long as the petals. *Ovarium* 3-sided, smooth, and glossy. *Style* smooth, erect. *Stigma* simple.

Our drawing of this rare plant was made in July last, at the Nursery of Mr. Colvill, where several plants of it have been lately received from North America; it was first discovered by Mr. Nuttall, and described by him in his *Genera of North American Plants*, in 1818, where he notices it as a very distinct species, "growing

on the drift sands of the ocean, in New Jersey, Delaware, Maryland, &c." The soil in which the plants came home was chiefly fine white sand, with a small admixture of decayed vegetable soil, so that to grow them in perfection in this country, it will be requisite to plant them in the same sort of soil, or in a mixture of light turfy peat and sand, to be composed chiefly of the latter; sea-sand, where it can be procured, is to be preferred: it will also be more likely to succeed well in a situation near the sea, than in an inland part of the country. It is also a very proper plant for rock-work, if planted in the same sort of sandy soil, where its little bushy canescent tufts will make a handsome appearance: young cuttings, planted in the same sort of soil, under hand-glasses or bell-glasses, will strike root readily, so that a little air be given them that they may not damp off; as soon as rooted, they should be potted off in small pots; for if left under the glasses, they will certainly damp, being so densely clothed with pubescence; or if not convenient to pot them off immediately, a great deal of air must be admitted to them; and as soon as they are properly hardened, the glasses should be taken quite away; when hardened in that manner, they may be taken up with little balls attached to them; and when potted, if placed in a shady situation, they will need no other protection; but if potted off as soon as rooted, they will require to be placed in a close frame for a few days, to make fresh roots, and must be hardened to the air by degrees.







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